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# Starting with psychology



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By Pat Spoors, Ernest Dyer, Linda Finlay and George Marsh

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# 1 Introduction

## 1.1 Welcome

An American psychologist by the unfortunate name of Edwin Boring wrote:

The most important and greatest puzzle which every man faces is himself and secondarily, other persons.

(Boring, 1950, p. 56)

It can be assumed that Boring was talking about women as well as men in the quote above. What could be more fascinating than ourselves and the people around us? Consider how often you have asked yourself: 'I wonder what she is thinking about?' or 'Did he really mean what he said?' or even 'I wonder why I did that?'.

The word 'psychology' is derived from the Greek *psyche*, which means 'soul' or 'mind', and *logos*, which means 'study'. Today, the British Psychological Society defines psychology as:

the scientific study of people, the mind and behaviour.

(British Psychological Society, 2010)

If you are reading this, you are probably interested in people and curious about what is going on in other people's minds, and you want to understand more about why people behave as they do. You may also be hoping to understand yourself a little better.

### Pause for thought

While studying psychology you may come to understand your own thoughts, feelings and behaviour a little better. However, if you feel that you have a problem that is related to your psychological health, then studies such as this will not provide you with the help you need. In these circumstances it is always better to consult a qualified practitioner.



## 1.2 Influences on people's minds and behaviour

You will probably find that as you work through the Y183 learning materials you will be asking more and more questions rather than finding straightforward answers. The reason for this is that when you study psychology you are studying people, and people are complicated and can be changeable. This is what makes psychology such a challenging and interesting subject.

Do the following activity and you'll start to see why trying to give a single, simple explanation for human behaviour is almost impossible.



Figure 1 Children playing



---

## Activity 1 Boys' toys and girls' toys

Allow about 5 minutes

In the photograph in Figure 1 there are two children playing with toys. You will see that the boy is playing with the truck and the girl with the doll. Most children, when given a free choice of toys, tend to select the toys that are thought to be appropriate for their gender. Can you explain why they behave in this way? You can give as many explanations as you want – even some that you don't agree with but think other people might come up with.

### Discussion

There are lots of possible explanations for this. Have a look at the list below and compare it with yours. It doesn't matter if your responses are different; that only goes to show how complicated explaining behaviour is!

- It is because boys and girls are biologically different. Girls are naturally more motherly and they pick dolls, whereas boys are naturally more interested in cars and trucks.
  - I think that sometimes boys might want to play with the dolls but they think that because they are boys they should pick boys' toys.
  - It is to do with the way they have been brought up, as the adults around them tend to give girls dolls and boys trucks. Also, children are often influenced by their friends. Boys will often make fun of other boys who play with dolls.
  - It has a lot to do with television and particularly adverts aimed at children. When they are trying to sell dolls, advertisers show girls, not boys, playing with them.
- 

In trying to understand the children's behaviour, we have a number of explanations that suggest that the reasons for the choice of toys could be related to:

- the child's biological gender
- what they think is the right kind of behaviour for their gender
- their upbringing and the way they are treated by adults and their friends
- wider cultural influences from the media.

In *Starting with psychology* you will be considering a number of different explanations that psychologists use in their attempts to understand

people. In the next chapter you will read about studies to investigate the influence of biology, specifically the brain, on behaviour. Chapter 3 will consider how the way people think about their world will affect their behaviour. The fourth chapter will focus on the influence of close relationships, and the fifth chapter will look at how identity is shaped by groups and the wider culture.

### 1.3 How do psychologists do psychology?

If most people try to understand why they, and the people around them, behave in certain ways, what marks out what psychologists do as different? The main distinction is that psychologists base their explanations on evidence rather than opinions or common-sense assumptions.

Psychologists have carried out lots of research, some of which contradicts common-sense assumptions and some of which supports them. However, the important point is that they have done so by collecting evidence using recognised procedures. It is partly through the use of these recognised procedures or research methods that psychology can claim to be the scientific study of people, the mind and behaviour.

We will be looking at a number of research studies throughout Y183, which use several different research methods. Some of the most frequently used methods are outlined below. Please note that people who take part in research studies are usually called **participants**.

#### **Participants**

people who take part in a research study

#### Case studies

The case study is an in-depth study of one individual or a small group of individuals. Usually the psychologist gathers evidence from interviews with the individual being studied, but they may also talk to people who are close to the individual or observe the individual's behaviour, or even consult past records such as school reports or medical notes. This method is often used for investigating people who are different in some way, for example they may have brain damage as a result of an accident or may have a remarkable memory.

#### Observation

In an observational study the psychologist simply observes participants, often in an everyday setting. For example, psychologists might watch children in a nursery to identify and record different types of play activities.



## Surveys and interviews

In this type of research the psychologist asks people questions. Sometimes they have a set of pre-prepared questions so everyone is asked the same thing. On other occasions the questions could be varied to take account of what the participant has to say.

## Experiments

In an experiment the researcher intervenes in a situation by deliberately changing one thing and seeing what effect this has. Sometimes a control group is used to compare with an experimental group. For example, if the psychologist wants to find out if caffeine can improve memory, they could give two groups of participants the same memory test but the experimental group is given a strong cup of coffee before the test. The results of the experimental group can be compared with those of the control group, who didn't get any coffee, to see if there is a difference in their scores on the memory test.

You will see many examples of these research methods being used in the various studies that are described in the following chapters.

## 1.4 Outline of Y183

The following is a summary outline of *Starting with Psychology* (see Figure 2). What must be emphasised here is that only a few areas of psychological enquiry and knowledge have been selected from the vast array that is available. In a short introductory module such as this it is not possible to do more, but we hope what follows will give you the appetite for further study.

Who we are, what we do, how we feel, what we fear and what we desire are all the result of a number of different influences which interact with each other in a complex way. In Chapters 2 to 5 you will focus on different types of influence – biology, thinking, relationships and social identities. In Chapter 6 you will see how you need to take account of all these influences to even attempt a complete explanation of an individual's thoughts, feelings and behaviour.

In each of the chapters we have picked a number of topics and studies that we hope you will find particularly interesting. In addition, in each chapter we have devoted one section to one particular topic – what makes us happy. You will see what study of the brain, thinking, relationships and social identities can tell us about happiness.

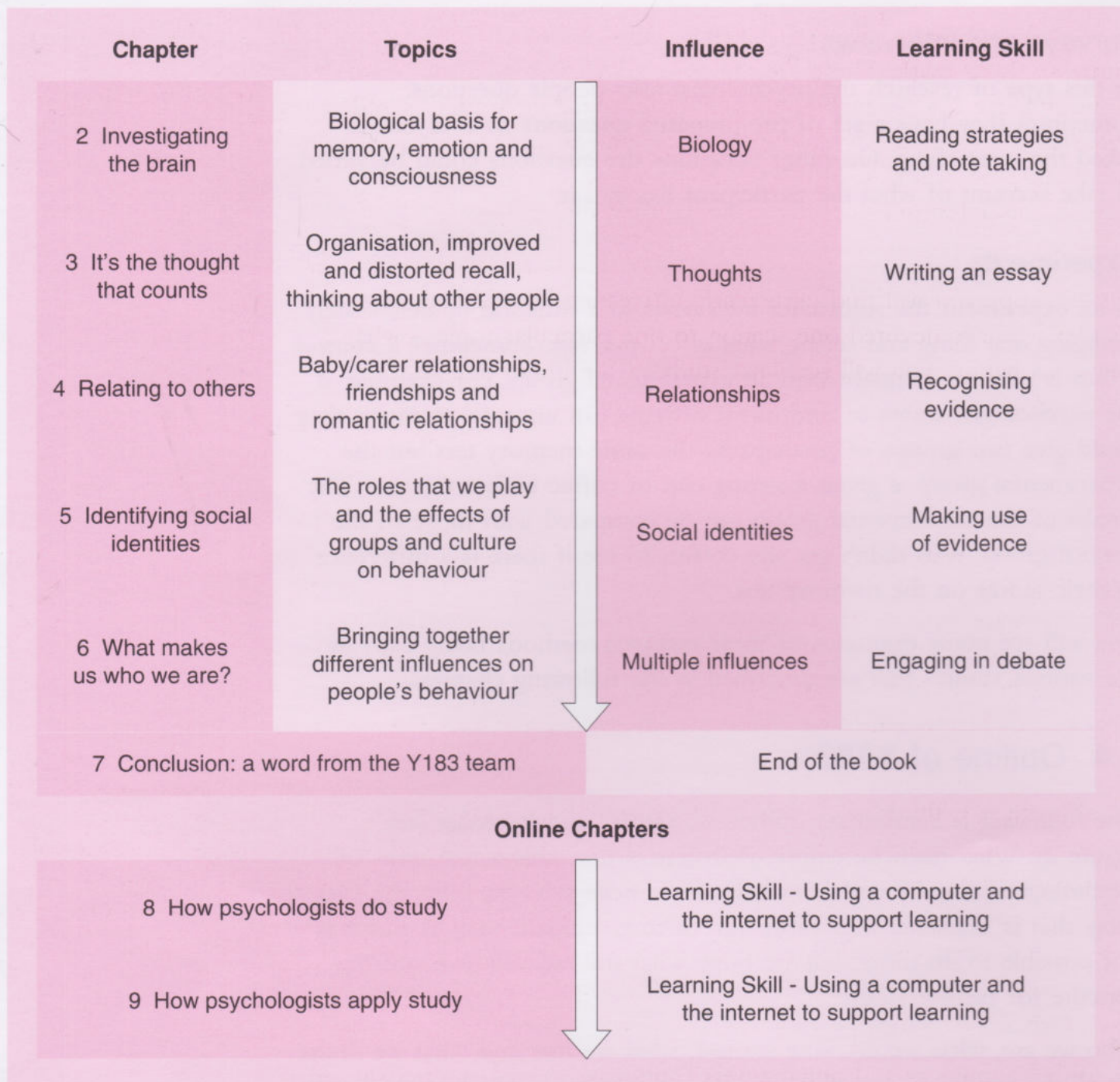


Figure 2 Outline of Y183 *Starting with psychology*

The book ends with a brief word from the Y183 team (Chapter 7) before you go on to study the final two chapters of *Starting with psychology*, which you can find on the Y183 website. Chapter 8 looks in more detail at 'How psychologists do psychology' and considers the main features, advantages and disadvantages of different research methods. Chapter 9 looks at 'How psychologists apply psychology' and examines some of the practical applications of psychological research.



Y183 will also help you to develop learning skills which you can use in future study or work. These are the skills which will help you to study more effectively. They include using different reading strategies and note-taking techniques, writing clearly, and organising your ideas. The online chapters will give you the opportunity to develop skills related to using a computer and the internet to support your learning.

In each of the chapters we have picked a number of topics and studies that we hope you will find particularly interesting. In addition, in each chapter we have devoted one section to one particular topic – what makes us happy. You will see what study of the brain, thinking, relationships and social identities can tell us about happiness.

## 1.5 What makes us happy?

Until very recently psychology had very little to say about happiness. It has actually been very much more concerned with unhappiness, depression and anxiety. However, in the past decade a number of psychologists have attempted to measure happiness and identify strategies that we can all use to increase our personal happiness levels. This rapidly growing field of happiness studies is called **positive psychology**.

One of the first things that must be done before investigating a topic is to define it. Happiness is not an easy quality to define. However, we can agree on a simple definition of happiness as a positive feeling covering a range of emotions from joy to contentment. Conversely, unhappiness is a negative feeling associated with a range of feelings from sadness to depression. Also, when we are happy we want the feeling to continue, and when we are unhappy we want the feeling to stop.

However, happiness and unhappiness cannot be viewed as opposite or mutually exclusive. Sometimes we can experience a confusing mixture of emotions when we feel happy and sad at the same time. How often have you seen people (usually the bride's mother) crying at weddings? We can also enjoy being sad when we choose to watch films that make us cry.

The pursuit of happiness appears to be a universal phenomenon. When people are interviewed about what they want most in life, the majority state that they want to be happy. While we would all like to feel happier simply because it is a pleasant feeling, there are also wider benefits associated with happiness. Happy people have better health, are more

**Positive psychology**  
a movement in psychology which emphasises what is right with people rather than what is wrong with them.



productive, are more successful, have better relationships with others and are generally more helpful and caring. Conversely, unhappy people are more prone to illness and they tend to be withdrawn and inactive. This is what makes happiness and how to increase happiness such a worthwhile subject for psychology to investigate.

## 1.6 Learning skills – reflection

One of the skills that you will be developing throughout this module is the skill of reflection in terms of thinking about your understanding, learning and progress. If you haven't studied for a while, this might be a new experience. All it means is that from time to time you should stop and think about what you have learnt, whether that is something to do with a particular psychological issue or a particular learning skill. As you go through Y183 you will be given specific opportunities to reflect, both when you are doing the set 'activities' and also as part of your marked assignment work.

If you glance through the rest of this book you'll see that you are invited to do a number of activities in each chapter. These activities are not tests – they are a very important part of distance learning. They are designed to help you to stop and think about issues, and to help you engage with material so that you learn through doing.

The activities provide an opportunity for you to work things out for yourself and also for you to apply ideas to your own life. Reflecting on your learning can help you to recognise the progress you are making and identify the areas and skills where you need more practice. Also, the process of being actively involved in your own learning helps to make study more interesting and enjoyable.

---

### Activity 2 Reflection

Allow about 10 minutes

Before you start the next chapter, make a few notes about how you feel so far. Many students find it useful to keep some notes as a study diary or log where they can note down these personal reflections. Consider the following questions:

- 1 Were there any sections of this chapter that you found particularly interesting or particularly difficult?
- 2 How do you feel about studying the rest of Y183?

## Discussion

Here is one student's response:

I found the idea of psychology being a science quite interesting as I hadn't thought about this before. I like the idea of learning to question opinions and ask for evidence. The last time I studied was at school and we were told just the opposite – accept what you are told and don't ask awkward questions.

I find the idea of there often being no clear answers and that I might end up with more and more questions a bit unsettling.

I feel a mixture of excitement and worry about studying the rest of Y183. This is the first time I have studied a university module so it is quite exciting to think of myself as a university student. Also I am really interested in this subject and would like to eventually work in this area, particularly with children who have problems. At the same time it's a bit scary wondering whether I'm up to it but I'm definitely ready to give it a go.

---

## 1.7 Conclusion

Psychology is the scientific study of people, the mind and behaviour. It covers a wide range of topics and ways of explaining human thought, feeling and action. As a scientific discipline, it bases its theories and predictions on evidence gathered through systematic research procedures. After reading this introduction, we hope that you will have an idea of what *Starting with psychology* holds in store, and feel ready to start looking at some of the different influences on us. You will begin by investigating the brain.



## 2 Investigating the brain

### 2.1 Introduction

You'll start your study of the different influences on behaviour by looking at the role of the brain. The human brain weighs about 1.5 kg (about three and a half pounds), contains approximately 100 billion nerve cells and is the most complex structure in the world. Although our knowledge of the brain has increased dramatically over the past 100 years, there is still much that we don't know about this fascinating organ. We did not always appreciate the importance of the brain. In fact, in Ancient Egypt when Tutankhamun was mummified, his heart, lungs and stomach were preserved but his brain was thrown away. It is also notable that the Bible makes numerous references to the heart but never mentions the brain. We still use phrases such as 'faint-hearted' or 'learning by heart' even though we know that fear and learning have more to do with the brain than the heart.

Why do some psychologists want to investigate the brain? Because what we are – our thoughts, memories, fears, desires and dreams – are all a result of the workings of the brain. Psychologists who study the brain are trying to understand people by looking at the influence of biology on behaviour. Other psychologists working in the area of **biological psychology** may focus on the effects of hormones, genes and even our evolutionary development.

**Biological psychology**  
a branch of psychology  
that studies the link  
between biology and  
psychological events

In this chapter you'll learn a little about what the brain looks like, its structure, and what the brain does – its function. What biological psychologists want to find out is which parts of the brain are responsible for producing specific feelings, thoughts and behaviours. Exactly where is a smile produced or where is speech generated, and which parts of the brain are used when you ride a bike?

However, while it seems obvious that the structure and function of the brain will have an influence on who we are, how we feel and what we can do, this is only half the story. It seems that sometimes it is the other way round and our thoughts, feelings and behaviour can influence the structure and function of the brain. For example, Eleanor Maguire and colleagues (2000) found that there is a slight difference in the structure of a small area of the brain in London taxi drivers compared with people who are not London taxi drivers. In taxi drivers who have been working in London for 40 years, this difference is even more



marked than in new taxi drivers. The authors suggest that the enlargement of this area of the brain is a result of repeatedly practising the navigational skills that cabbies need to use to get round this large and busy city.

In order to learn or memorise a fact or skill, there must be changes in the brain that represent the new knowledge. The ability of the brain to change with learning and experience is known as **plasticity**.

Section 2.2 of this chapter ('A quick tour of the brain') will outline some of the main features of the brain. Section 2.3 ('Memories are made of this') will focus on different types of memory loss and how the study of people with memory problems can help us locate the areas of the brain involved with memory. In Section 2.4 ('Hurt feelings') you'll look at how an alteration to a part of the brain can be linked to a change in emotional responses and even personality. Section 2.5 ('A brain of two halves') focuses on the fact that the brain is divided into two hemispheres and asks whether certain responses are under the control of one hemisphere more than the other. Section 2.6 explores what a study of the brain can tell us about 'what makes us happy'. In the learning skills section you'll look at different reading and note-taking strategies.

Biological psychologists have a number of research methods that they can use to investigate the human brain. This chapter is going to focus on just one approach, which is to examine some case studies of people who have experienced accidental damage or deliberate alteration to their brains. The case studies tell the stories of some very unusual people. However, you will see that by studying these cases, researchers have been able to gain insights into how the normal undamaged or unaltered brain functions.

### **Plasticity**

the ability of the brain to adapt to changing circumstances

### The aims of this chapter are to:

- introduce the basic structure of the brain
- consider research that has tried to identify the physical location of different types of memory
- discuss how injury to the brain can alter emotional responses
- describe the different functions of the two hemispheres of the brain
- discuss the biological influences on 'what makes us happy'
- introduce strategies for active reading and effective note taking.

## 2.2 A quick tour of the brain

Before you start to read case studies about people who have experienced brain damage or alteration, it is important to understand the basic structure of the brain. If you are not too squeamish, imagine you have lifted off the top someone's skull and peeled back a thin protective membrane. You are now looking down on the brain sitting in a pool of liquid. You have probably heard the phrase 'grey matter', and one of the first things you would see is that the outermost layer of the brain is indeed slightly grey in colour. It also has many dips and folds.

You would also notice that the brain is divided into two halves or hemispheres, with the division running from the front to the back of the brain (see Figures 3 and 4). Although these two hemispheres look the same, and they have a similar structure, there are differences in the ways they function, so they control different responses. For example, the left hemisphere controls and receives information which comes from the right side of the body, and the right hemisphere controls and receives information which comes from the left side of the body.

The two hemispheres of the brain are joined together by a bundle of approximately 200 million nerve cells that pass messages between the two hemispheres. This connecting bundle of cells is called the **corpus callosum**.

One way of describing the brain is to think of it as three layers. The innermost part is called the **central core**, and this area is responsible for many basic functions, such as heart rate, sleep and reflexes. Next is

#### **Corpus callosum**

a bundle of nerve cells which connect one hemisphere of the brain with the other

#### **Central core**

the most central part of the brain, consisting of structures which regulate basic functions



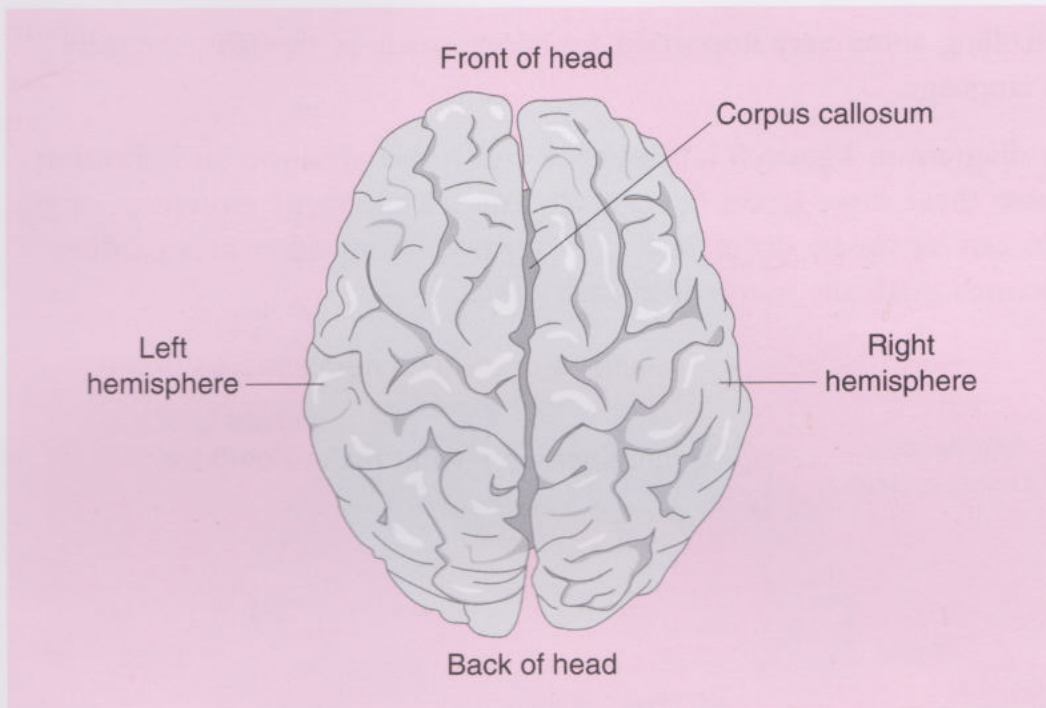


Figure 3 Looking down on the brain

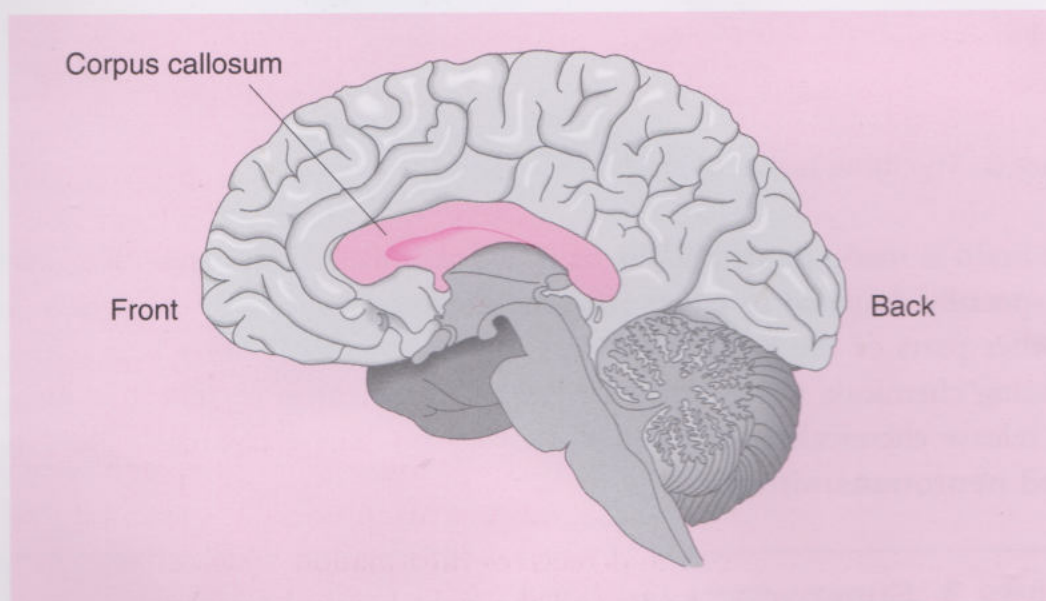


Figure 4 A cross-section of the brain

a layer called the **limbic system**, which contains a number of structures that surround the top of the central core. The limbic system is involved in emotional responses. Finally, the two cerebral hemispheres (together called the **cerebrum**) fit like a cap over most of the rest of the brain. The surface layer of the cerebrum is called the **cortex**. Although it is only a thin layer (3–4 mm thick), the cortex is vitally important in

### Limbic system

a group of interconnected structures in the middle of the brain that are especially concerned with emotion and motivation

### Cerebrum or cerebral hemispheres

the largest part of the brain, consisting of two lobes or hemispheres. The cerebrum processes information from the senses and controls voluntary movements and thinking

### Cortex

the outer layer of the brain



controlling some very important functions, such as thought, memory and language.

The diagram in Figure 5 is simplified but it will give you an indication of how these three layers fit together. Also, while some structures of the brain can be clearly distinguished as separate from other areas, other structures gradually merge into each other.

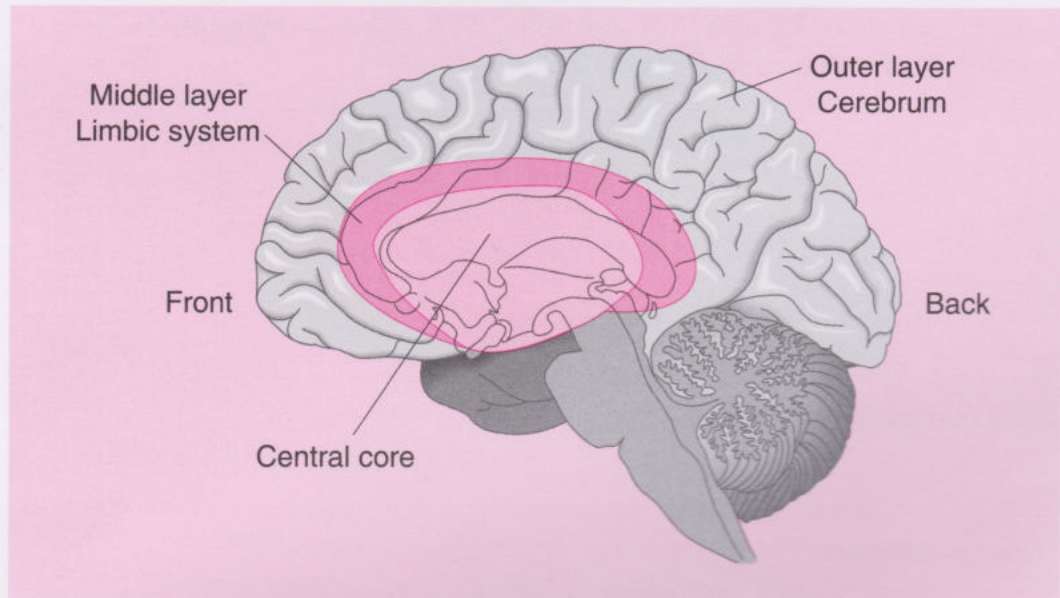


Figure 5 The three layers of the brain

### Neuron

a type of cell that forms part of the nervous system and which is specialised for processing information

The brain is made up of billions of nerve cells called **neurons**. Neurons are specially designed to either receive information or send out signals to other parts of the body. They pass messages to each other by releasing chemicals which affect a neighbouring neuron so that it in turn will release chemicals and pass this message on. These chemicals are called **neurotransmitters**.

### Neurotransmitter

a chemical that is released from a neuron and influences a neighbouring cell.

---

## Activity 3 Summarising the brain

Allow about 15 minutes

It is a good idea to pause at the end of each section and make sure you have a clear understanding of what you have just read, especially a section with as many new terms as the one you've just read. One of the best ways to do this is to make some brief notes that summarise the text and pick out the main points.

Read through the section above describing the brain, and make some brief notes.

## Discussion

From your notes, could you explain what is meant by 'plasticity', 'neuron' and 'neurotransmitter', describe how the two hemispheres are joined by the corpus callosum, and describe the three layers of the central core, the limbic system and the cerebrum?

At the end of this chapter there is a learning skills section covering different note-taking techniques. Save your notes, and when you get to the end of the chapter compare the approach that you have taken with the techniques outlined in Section 2.7.

## 2.3 Memories are made of this

You have to begin to lose your memory, if only in bits and pieces, to realise that memory is what makes our lives. Life without memory is no life at all ... Our memory is our coherence, our reason, our feeling, even our action. Without it, we are nothing ...

(Luis Buñuel)

It would be difficult to overestimate the importance of memory in our lives. It not only allows us to learn and therefore profit from previous experiences; it also defines who we are. The quote from the Spanish film-maker Luis Buñuel has great poignancy. He is writing about his mother's loss of memory and it seems that as his mother is losing her memory, he is losing his mother.

The devastation that comes with memory loss is particularly well illustrated by the first case study that you'll look at, that of Clive Wearing. Clive has probably the worst case of memory loss or **amnesia** ever recorded and, unusually, it was caused by something as common as the cold sore virus.

### **Amnesia**

a partial or complete loss of memory

### Clive's story

On Wednesday 27 March 1985, Clive Wearing woke up very confused and with an extremely high temperature. The doctor diagnosed flu and explained that the high temperature and lack of sleep were causing the confusion. He gave Clive a sleeping pill and



told his wife Deborah that she should go to work as he would sleep for at least eight hours.

When Deborah got home that evening the house was empty and Clive was missing. He was eventually found by the police and taken to hospital, where some time later the correct diagnosis was given to Deborah. In some extremely rare cases the cold sore virus can attack the brain rather than the mouth and cause a swelling of the brain so that the brain tissue starts to press against the bones of the skull.



Figure 6 Clive and Deborah Wearing in 1987

The virus had damaged several parts of Clive's brain. One of the most affected areas was a part that plays a vital role when recalling old memories and forming new memories. This part of the brain is called the **hippocampus** and it is made up of two seahorse-shaped structures near the centre of the brain (Figure 7).

### Hippocampus

a curved, seahorse-shaped structure near the centre of the brain which plays an important role in emotional behaviour and memory

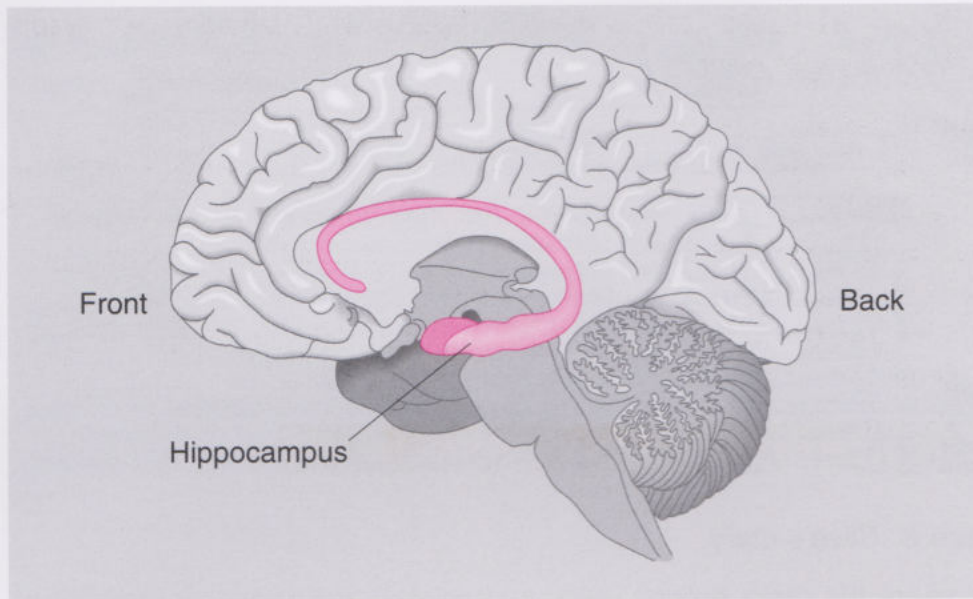


Figure 7 The hippocampus

Clive was 46 years old when this illness struck him. He was a noted musician, academic and conductor, and had a successful career with BBC Radio 3. This illness has left him completely unable to form new memories and with very little recall of his life from before the illness. He constantly states that he has just woken up after years of unconsciousness, and especially in the years immediately after this event was often distressed, extremely confused and angry. He described his condition as:

one night 20 years long with no dreams and no thoughts. My brain has been totally inactive, day and night exactly the same. There's no difference between this and death.

(Clive Wearing, quoted in Brown, 2005)

Deborah provided Clive with a diary in the hope that writing down what was happening could help him hold on to enough of the past to make sense of the present. However, as his diary entries show (see Figure 8), within minutes of making an entry he has forgotten that he has made it, claims that the entry is not true and crosses it out to make a new entry.



Figure 8 Clive's diary

For years his diary entries were just pages and pages of crossings out as he wrote down what he believed was his first thought since gaining consciousness. The panic of having no past that he could remember continually destroyed the few moments of the present which he was trying to understand.

Clive can remember very few things about the past. He can remember his name, some facts about his childhood and going to Cambridge University. He knows that he has children but can't remember how many or their ages. The most important memory he has managed to hold on to is his wife, Deborah, whom he loves today with all the passion of their first years together. However, if Deborah leaves the room for a few moments, when she returns he greets her with huge joy as if they had been apart for years.

The **neurologist** Oliver Sacks (1985) wrote about a man with a similar case of amnesia and asked whether his illness had left him as a 'spiritual casualty' and 'de-souled' him. Deborah, however, believes to this day that the essence of her husband is still there and capable of making important human connections:

I realised that we are not just brain and processes. Clive had lost all that and yet he was still Clive. Even when we didn't see one another, when we were six months apart and only spoke on the telephone, nothing had changed. Even when he was at his worst, most acute state, he still had that huge overwhelming love ... for me. That was what survived when everything else was taken away.

(Deborah Wearing, quoted in France, 2005)



As well as remembering Deborah, Clive has managed to hold onto another important memory. He is still able to read music, play the piano and conduct a choir even though he has no memory of doing these things in the past. In fact, he seems to be most at peace when playing the piano. It is as if once he has started playing, each note cues the next note and the panic of being lost in time is temporarily calmed.

What can Clive's story tell us about the brain and memory? Clive can remember very little about his past life and can't even say what he was doing a few minutes ago. On the other hand, he can remember how to play the piano. So perhaps we don't have just a single memory but instead we have different types of memories for storing different types of information.

### Different types of memory

Psychologists have described three different types of memory:

- **Episodic memory** is our memory for our personal past experiences. We use this type of memory when we recall what we had for breakfast or remember playing with a childhood friend.
- **Semantic memory** is our memory for factual knowledge, such as two plus two equals four or the capital of France is Paris.
- **Procedural memory** is our memory of how to do things, such as riding a bike or playing the piano.

**Episodic memory**  
memory of our  
personal past

**Semantic memory**  
memory of facts

**Procedural memory**  
memory of how to do  
things

---

### Activity 4 Sorting out your memories

Allow about 10 minutes

Read through the list of memories below and state whether each one is an example of episodic, semantic or procedural memory:

- 1 Remembering how to roller-skate
- 2 Remembering the name of the President of the USA
- 3 Remembering how to start a car
- 4 Remembering your favourite teacher from school
- 5 Remembering that water boils at 100°C
- 6 Remembering what time you went to bed last night



## Discussion

Both (1) and (3) are procedural memories as you are recalling how to carry out a set of actions. (2) and (5) are semantic memories as these are facts, while (4) and (6) are episodic memories related to your own personal past.

---

Coming back to Clive, you have seen how his episodic memory was almost totally destroyed as he could recall very little of his past life. His semantic memory also suffered some damage as he gets confused about simple factual information that would have seemed obvious to him before his illness. However, his procedural memory was unaffected as evidenced by his ability to play the piano. So while Clive has suffered damage to several areas of his brain, the areas involved in procedural memory have remained intact.

We know from other studies that the area of the brain that is mainly responsible for the efficient working of the procedural memory is a fist-sized structure at the lower back of the brain called the **cerebellum** (Figure 9).

Damage in this area of the brain can also lead to problems with balance, difficulties in making precise movements such as picking up a small object, and difficulties in acquiring new skills.

### Cerebellum

a fist-sized structure located at the lower back of the brain which is involved in the control of movement

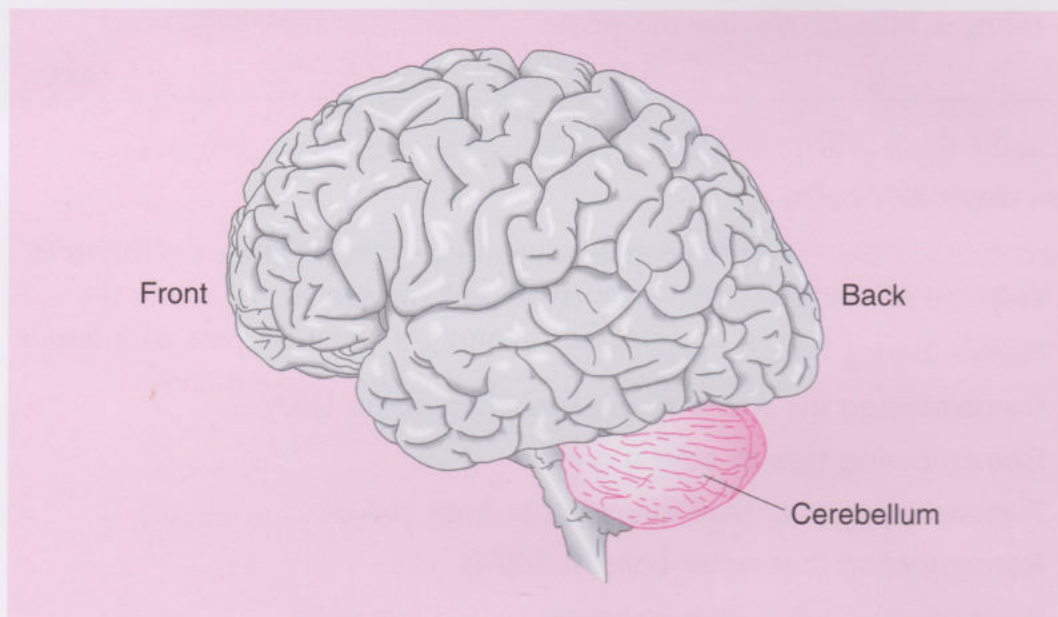


Figure 9 The cerebellum

Interestingly, some work carried out by Brenda Milner (1965) on a man suffering a type of amnesia similar to Clive's revealed that there may still be some capacity to learn new skills and acquire new procedural memories. For example, learning to read mirror writing is something that most people find difficult on the first attempt. If you hold a book in front of a mirror, you will see how difficult it is to read the words in the reflection. Performance does improve with practice until eventually the mirror writing can be read with ease. People with an inability to form new memories can show a similar improvement in performance. Over a three-day period, the people in Milner's study showed a day on day increase in speed of reading. However, on the second and third days they could not remember that they had been asked to do this task before. This suggests that some parts of the brain, such as the cerebellum, are crucial in learning new procedural skills, such as reading mirror writing, while other parts, such as the hippocampus, are crucial in remembering that the skill has been learnt.

### The role of the hippocampus

The importance of the hippocampus in allowing us to recall the past and make new memories has been supported by a number of studies. Clive's story is just one, particularly tragic, example. However, we cannot assume that just because damage to the hippocampus is linked to problems with episodic memory, the hippocampus is the only area of the brain involved in episodic memory.

Some people have a similar form of amnesia, often as a result of long-term alcoholism. The damage seems to be caused not directly by the alcohol but by a deficiency in the vitamin thiamine, as alcoholics are often malnourished. On examining the brains of such individuals it is obvious that there are several areas of damage. However, in some cases the hippocampus appears to be normal. This suggests that while the hippocampus is involved in episodic memory, it must be part of a larger system, and damage to any part of the system can cause memory deficits. As researchers continue to discover more about the brain, they find that even the simplest thoughts, actions or responses usually involve several areas, and damage to any one particular area or the connections between areas can cause a problem.

### What of the future?

Scientists studying the brain are particularly interested in tracing the physical basis for our memories. Acquiring such knowledge could be



the first step in developing treatment and therapies to mitigate all sorts of memory loss. This is not going to be a simple task because there are many areas of the brain that are involved with the formation of new memories as well as the retrieval of old memories. There are also differences related to the type of memory being considered: episodic, semantic or procedural.

At the moment there is very little that can be done for people like Clive who have severe memory problems. There do seem to be benefits in providing a safe environment where people can be cared for and live a life ruled by routine. It might take many years, but most people with memory problems will experience some slight improvement in their quality of life under these conditions.

However, recent work in this area is holding out the possibility that just as we can insert an artificial hip, we might someday be able to insert an artificial hippocampus.

A team led by Theodore Berger (see Graham-Rowe, 2003) at the University of Southern California has studied the role of the hippocampus in processing information from one area of the brain to another. The team has developed a microchip that can carry out the same function. So far it has been tested only on specific slices of the brain tissue of rats, but these tests have proved successful. The next step will be to test the microchip in live rats and then in monkeys before it can be used with humans.

All this will take many years of painstaking work and it is unlikely that a human implant will return the recipient to the level of functioning they were capable of before the brain damage, but it could mean a much brighter future for people who have suffered memory loss.



### **Pause for thought**

Take a moment to consider the rights and wrongs of carrying out research like that described above on animals. Are scientists justified in using animal brains in this way if there is a possibility of developing a treatment that could improve life for many people with memory problems? There are strict laws about the use of animals in research, relating to their proper care and the minimisation of pain and discomfort. Many people feel that this is

not enough and, whatever the potential benefits to humans, animals should not be used in this way. What do you think?

## 2.4 Hurt feelings

**Affect** is the term that psychologists use when they are talking about feelings or emotions. For example, if someone is very depressed or extremely elated without any obvious cause, a psychologist would describe them as having an affective disorder. In this section you will look at two case studies which link brain alteration with changes in emotion or affect.

### **Affect**

a feeling or emotion

### Phineas's story

In September 1848 a young man called Phineas Gage was involved in a horrendous and very well-known accident while working on the American railway. The workers were using explosives to clear the way for the new railway. When one explosion went wrong, a tamping iron (a metal rod 3 cm in diameter) was blasted through Phineas's head.

The iron entered just under his left cheekbone and exited through the top of his skull, having passed through his brain. Astonishingly, he survived, recovered from this accident and showed little change in his intellectual abilities.

His emotional responses, however, were very different from what they been before. He had been a quiet, capable and responsible foreman. After the accident he was difficult, impulsive and quick-tempered, with a tendency to curse and swear that he had never shown before.

Looking at Phineas's injuries it seems as though most of the damage was done to the very front of the brain (see Figure 10). The area just behind the forehead contains the prefrontal lobes. This led to the suggestion that the prefrontal lobes have a role to play in preventing or inhibiting inappropriate emotional behaviour and that the damage done to this area in Phineas's case had removed this inhibition.



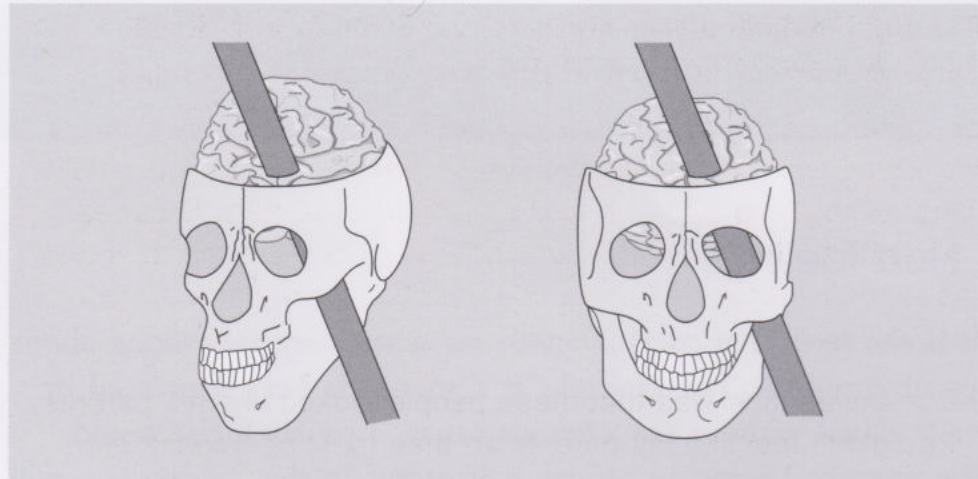


Figure 10 The likely path of the rod through Phineas's brain

This incident occurred over 150 years ago, but it is still frequently referred to. The outstanding feature of the incident is that although the unfortunate Phineas suffered serious and extensive brain damage, he not only lived but also retained most of his intellectual skills. However, the damage resulted in a change in personality and left him with difficulties in controlling his emotional responses.

This case provided early evidence that the prefrontal lobes have a role to play in ensuring that our behaviour is socially appropriate.

Next we'll look at another case study, where damage to the brain had an impact on the emotional response of a young man, in this instance affecting how he responded to his parents.

### Arthur's story

A fascinating study of accidental damage affecting an emotional response is described by the neurologist Vilayanur S.

Ramachandran (1998). His patient was a 30-year-old man called Arthur, who had suffered a serious head injury in a car accident. His condition was critical but he eventually awoke from his coma and underwent treatment and rehabilitation until he seemed to be completely back to normal, except for one problem, a very rare condition called **Capgras delusion**.

Arthur was convinced that his parents were impostors. He admitted that the two people who said they were his parents looked very much like his parents, but he was adamant that they were not his parents. He was genuinely puzzled by the fact that these two

### Capgras delusion

a disorder in which a person believes that someone they know, usually a close family member, has been replaced by an identical looking impostor

strangers took such good care of him, and speculated that his real parents were probably paying them.

Even more bizarrely, the delusion that his parents were impostors disappeared when he talked to them on the phone but was always firmly back in place when he was physically with them. Distressingly for the parents, this lack of recognition was limited to them. Arthur recognised all sorts of other people, such as former friends, and did not claim that they were impostors.

Arthur's explanation was that these people looked like his parents but they didn't feel like his parents so they must be impostors. Ramachandran set about investigating Arthur's delusion rather like a detective. He came up with a number of possible explanations and then tested each one in turn. You probably go through a similar investigative process yourself when dealing with problems in your everyday life.

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## Activity 5 Why won't the kettle work?

Allow about 10 minutes

Suppose your kettle stops working. Make a brief note of the steps you would go through to try and work out why this has happened.

## Discussion

In order to obtain boiled water from your kettle, a whole system – including the kettle, flex, plug and electricity supply – needs to be working correctly. A fault anywhere in the system means that the water will not boil. Most people will try to test each part of the system to isolate where the problem is located. Your answer probably included steps such as making sure the kettle is switched on and the plug and flex are properly connected, checking to see if there is a power cut by switching on another electrical appliance, checking the fuse in the plug, and so on.

This is obviously a very simple example; trying to locate a fault in the system in the brain that recognises and responds appropriately to parents is very much more complicated. However, it does illustrate that when a simple response such as recognising parents fails, then the investigator needs to consider several different areas of the brain and the connections between these areas.

---

In a similar way to the example in the activity above, Ramachandran tried to isolate where the fault was in Arthur's system of recognising and responding to his parents. He first asked whether Arthur had a



problem with recognising faces, particularly those of his parents. This seemed not to be the case as Arthur recognised other familiar people as being genuine, and although he insisted his parents were impostors, he agreed they looked just like his real parents. So Ramachandran was able to rule out the possibility that the problem was due to damage to the area of Arthur's brain responsible for face recognition.

Next Ramachandran asked whether Arthur had suffered damage in the areas of his brain responsible for emotional responses. Again this seemed not to be the case. Arthur showed a range of normal and appropriate emotional responses. When he was with Ramachandran he would laugh at jokes and make jokes himself. At other times when discussing his condition he became understandably frustrated and occasionally very distressed.

Ramachandran decided to carry out a simple test to find out if Arthur had any emotional response to pictures of his parents. Whenever we have an emotional response, we automatically start to sweat a little more than usual. Changes in rates of sweating are easily measured by putting electrodes onto a person's palm. Research shows that if we look at a picture of our mother or father, our sweat rate will increase. When people who do not have Capgras delusion take this test, they show no response to pictures of strangers but do show a sudden increase in sweating when they see pictures of their parents. Arthur was shown pictures of his parents mixed in with pictures of strangers and his sweat reaction was the same to all of the pictures, indicating that there was no emotional response to strangers or parents.

Arthur had normal recognition for faces and expressed a normal range of emotions except that he did not respond emotionally to seeing his parents. This led Ramachandran to suggest that it is the link between the face recognition area and the emotional response areas of the brain that is damaged in Arthur. For most of us, recognising someone who is very close to us, such as a parent, will elicit an emotional response, usually a feeling of love or affection. Arthur sees two people who look just like his parents but he doesn't experience the emotional response that he would expect, so his rational explanation is that these people are impostors. They look like his parents but they don't feel like his parents. This does not happen when Arthur talks to his parents on the phone. He is happy to accept these same people as his real parents when he hears them rather than sees them. On the phone they sound like his parents and feel like his parents. This is because the links between the



area of the brain that recognises familiar voices and the emotional responses areas are intact, and the whole system is working normally.

So Arthur's story and his rare condition do have something to tell us about normal brain functioning. A simple response like recognising our parents involves links between different areas of the brain. In addition, the areas and links involved in recognising our parents are different depending on whether we are seeing them or hearing them.

In the next section you will read about a deliberate alteration of the brain and what this has told us about the different functions of the left and right hemispheres.

## 2.5 A brain of two halves

In Section 2.2 you read that the brain is divided into two hemispheres connected by a bundle of nerve cells called the corpus callosum. You may remember that the left hemisphere controls and receives information from the right side of the body, while the right hemisphere controls and receives information from the left side of the body.

The two hemispheres may also differ in the extent to which they control certain functions such as producing speech, daydreaming or recognising someone's face. Some functions may be more under the control of one hemisphere, so that hemisphere will dominate the other. Other functions may be shared equally by both hemispheres. For example, the speech area is usually located in the left hemisphere, except in some, but not all, left-handed people who may have areas controlling speech on both left and right hemispheres. Conversely, both hemispheres play a role in vision although it is the right hemisphere that receives information from the left visual field and the left hemisphere that receives information from the right visual field.

You will have noted from the mention of left-handed people above that not all brains are organised in the same way. Another finding in this area is that males, especially right-handed males, have greater left hemisphere dominance for speech than females. Therefore if a man suffers damage in the speech area of his left hemisphere, this will have a greater impact on his speech compared to a woman who has suffered similar damage.

However, bearing in mind that there will be some differences between people in the way that their brains are organised, we do have a range of evidence that suggests that generally the two hemispheres are dominant



### **Perception**

the interpretation and understanding of information received from the senses

### **Spatial ability**

the ability to mentally manipulate figures in space

### **Hemispherical specialisation**

the specialisation of the left and right hemispheres of the brain so that different functions are associated more with one hemisphere than the other

### **et al.**

translates as 'and others' and is often used when a number of people have been involved in a piece of research. You can just give the name of the main researcher and use 'et al.' to indicate that there were a number of other researchers

in different areas. The left hemisphere dominates for speech, writing, mathematical ability, logic and analysis. The right hemisphere dominates for **perception, spatial ability**, musical and artistic abilities, imagery and dreaming. The right hemisphere also seems to be more emotional and negative compared to the positive and rational left hemisphere.

Evidence to support the proposal that one hemisphere may dominate the other for a particular function, or **hemispherical specialisation**, has come from a number of sources. In this section you will consider what has been learnt through research with people who have had an operation that splits the left hemisphere of the brain from the right hemisphere of the brain, and people who have had a stroke caused by a blood clot or bleeding in the brain.

## **The story of the split-brain patients**

A surgical procedure that cuts through the corpus callosum has provided evidence to support the different specialisations of the left and right hemispheres of the brain. This procedure is used very rarely and always as a last resort when someone has frequent and major epileptic seizures that do not respond to drug treatment. The frequency and severity of their epileptic fits is very disabling and their quality of life is poor. The attacks can even be life threatening. In these patients epileptic activity would start in one area of the brain and then spread across the corpus callosum to all areas of the brain. By cutting the connections between the two hemispheres, epileptic activity is contained in one hemisphere only. The operation usually leads to a significant decrease in the frequency and severity of the seizures without any apparent interference in normal functioning.

Early researchers were puzzled by the fact that people who had undergone this operation did not show any noticeable changes in behaviour, personality or their scores on intelligence tests, despite such extensive surgery.

In fact, researchers wondered what the purpose of the corpus callosum was if you could cut through it with so little effect. However, careful testing by Roger Sperry (1968) and colleagues uncovered behaviour that was far from normal. This work was to gain him a Nobel Prize in Medicine in 1981.

Sperry **et al.** devised a number of split-brain experiments using people who had undergone split-brain surgery as participants, and comparing their responses with people who had not had this surgery. In one

experiment the split-brain participant was blindfolded and given objects to explore with their left hand. Sperry chose this format because information from the left hand goes to the right hemisphere, but speech is generally controlled by the left hemisphere.

Participants were unable to tell the experimenter the name of the object they were holding in their left hand even though they could obviously recognise the object because they would make appropriate gestures with it. For example, if the object was a key, they would hold it out as though putting it in a lock, and turn it.

Because the right hemisphere does not talk and could not transfer information to the left hemisphere, the object could not be named. However, as soon as the participant touched the object with their right hand, they were able to name it instantly.

In another experiment the participant sits at a table with a screen in front of them. They are asked to place their hands round the sides of the screen so that their hands are hidden from view. The participant is then asked to fix their eyes on a spot in the centre of the screen (Figure 11).

A word is flashed onto one side of the screen very briefly (for approximately one tenth of a second). The word has to be flashed very quickly so that the participant does not have time to move their eyes and the information will go to only one of the brain hemispheres.

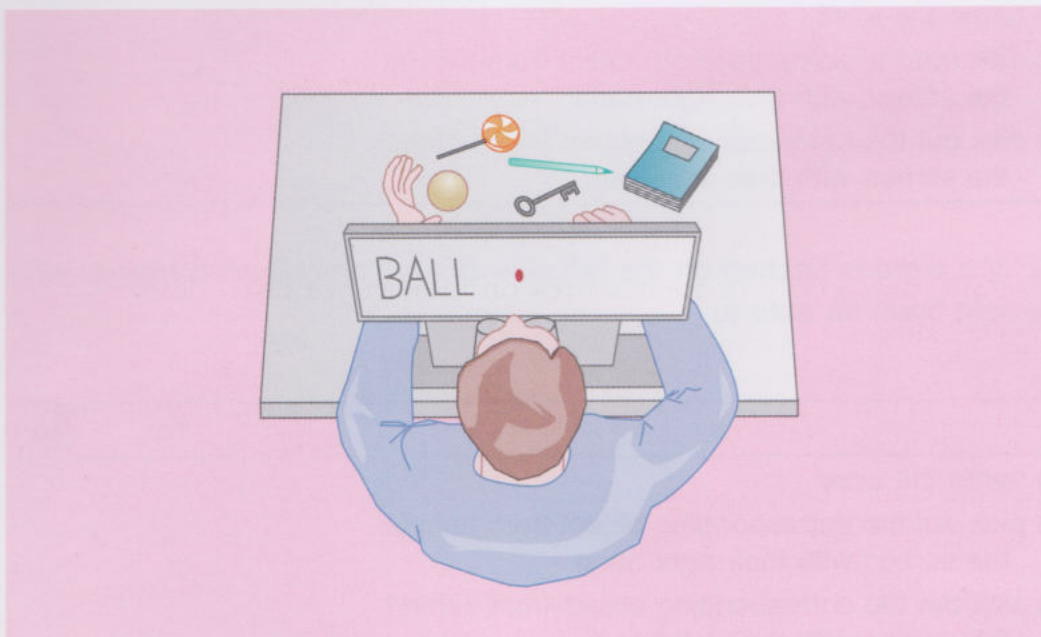


Figure 11 A split-brain study



When a word is flashed onto the left-hand side of the screen, the information will go to the right hemisphere of the brain. The information cannot be passed to the talkative left hemisphere, so the participant cannot tell the experimenter what the word was.

However, the participant can use their left hand to explore a pile of objects behind the screen and easily pick out the object that corresponds to the word that has been flashed up. They still won't be able to tell the experimenter what the left hand is doing as sensory information from the left hand is going to the silent right hemisphere only. Also, they can't find the right object with their right hand as the right hand is controlled by the left hemisphere and the left hemisphere did not see the flashed word.

---

### Activity 6 Sorting out right from left

Allow about 10 minutes

Reading about this split-brain experiment can be a little confusing as you try to sort out right and left hands, hemispheres and sides of the screen. This activity should help to make things clearer.

- 1 If a word is flashed on the right side of the screen, will a person with a split brain be able to:

---

	Yes	No
(a) name the word		
(b) pick out the corresponding object from behind the screen with their right hand		
(c) pick out the corresponding object from behind the screen with their left hand		

---

- 2 If a word is flashed on the left side of the screen, will a person with a split brain be able to:

---

	Yes	No
(a) name the word		
(b) pick out the corresponding object from behind the screen with their right hand		
(c) pick out the corresponding object from behind the screen with their left hand		

---

## Discussion

Don't worry if you found this activity difficult. Many people find it far from easy to follow a path from a word on the right side of the screen to the left hemisphere of the brain and then to the right hand.

In Question 1 the word is flashed on the right side of the screen so the information will go to the left hemisphere of the brain. As speech is usually controlled by the left hemisphere, the person should be able to name the word. As the left hemisphere also controls the right side of the body, the person will be able to pick out a hidden corresponding object with their right hand but not with their left hand.

So the answers to Question 1 are:

- (a) Yes
- (b) Yes
- (c) No

In Question 2 the word is flashed on the left side of the screen, so the information will go to the right hemisphere. The person will not be able to name the word and will not be able to pick out a corresponding hidden object with their right hand. This is because the right hemisphere does not control speech or the right side of the body. The right hemisphere controls the left side of the body, so the left hand will be able to select a corresponding object.

So the answers to Question 2 are the opposite to those for Question 1:

- (a) No
  - (b) No
  - (c) Yes
- 

In split-brain experiments the techniques used will limit information to one hemisphere only, and the person behaves as if they have two separate brains with each hemisphere appearing to operate with no conscious awareness of what is happening in the other hemisphere.

Of course, in everyday activities split-brain people can operate normally because they can move their eyes and make sure that incoming information is available to both hemispheres. Occasionally odd behaviours do occur, especially in the early days after surgery. A patient might find that they are buttoning up a shirt with one hand and unbuttoning it with the other hand or that their left hand suddenly closes a book that they were engrossed in.



### Stroke

a sudden change in the blood supply to a part of the brain, which can cause damage to that part of the brain

A case study from the 1950s that is related to the two halves of the brain dominating different functions is described by Ramachandran (1998). The individual concerned had not undergone split-brain surgery but had suffered a **stroke**.

### Split-brain behaviours in a stroke patient

The patient made a good recovery from the stroke and appeared to be normal, except that every now and then she would try to strangle herself with her left hand. She would use her right hand to try to control the attacks from the left hand. Most doctors that she saw thought she had some sort of mental illness. Eventually she was sent to see Dr Kurt Goldstein, a neurologist. He examined her and was satisfied that her strange behaviour was not a result of mental illness. He speculated that her stroke had destroyed part of the corpus callosum. This meant that the right and left hemispheres of the brain were no longer communicating normally with each other.

He proposed that the emotional right hemisphere in this patient had suicidal tendencies which until now had been kept in check by the rational left hemisphere. The damage to the corpus callosum had removed this check so the right hemisphere, which controls the left side of the body, was now free to issue commands to the left hand to try to strangle the woman.

This explanation, which many of Goldstein's colleagues described as bizarre, was given some support when this woman sadly died shortly afterwards from a second stroke. An autopsy revealed that the first stroke had indeed destroyed most of her corpus callosum, interfering with the communication channel between the two hemispheres of her brain.

Ramachandran (1998) points out that doctors have noted for some time that patients who have stroke damage in the left hemisphere appear to be much more concerned about their condition compared with patients who have stroke damage in the right hemisphere. When the rational left hemisphere is damaged, this seems to allow the emotional right hemisphere free rein to worry about everything. However, when the right hemisphere is damaged, the patient can appear to be totally unconcerned because the left hemisphere just doesn't get that bothered.

In the next section you will explore what investigations of the brain can tell us about what makes us happy.



## 2.6 What makes us happy – happy brains

In this chapter you have learnt how alterations to the brain by illness, an accident or surgery can be linked to alterations in behaviour. In this final section the focus will be on how behaviour could alter the brain and lead to increased happiness.

### Healthy lifestyle and a happy brain

In order for us to have a sense of wellbeing and happiness, our brains and bodies need a consistent source of food and oxygen. Research has shown that some chemicals which are contained in the food that we eat can regulate our moods. Also, by eating the correct foods we keep our bodies functioning well, which contributes to feelings of wellbeing.

Your brain and all the cells in your body need a steady supply of sugar at all times. The level of sugar in the blood fluctuates during the day. When you eat, your blood sugar level goes up, and when you use energy, your blood sugar level goes down. When your body has the optimal level of sugar in the blood you feel good, but when your blood sugar becomes too low the cells don't get the chemicals they need, so you can feel tired or irritable.

The most efficient source of sugar for most people is carbohydrates because they require the least amount of work for the body to convert them to energy. Complex carbohydrates such as potatoes, grains, fruits and cereals release energy very slowly, so they help to stabilise our energy and mood. Simple carbohydrates such as refined flour and sugar release energy quickly but this can be followed by tiredness and lethargy – some people call it a 'crash'.

Many people on high-protein, high-fat, low-carbohydrate diets have reported unusually high feelings of anger, tension and depression. Judith Wurtman (1996), director of the Women's Health Program at the Massachusetts Institute of Technology, has shown a connection between a diet low in carbohydrates and low levels of **serotonin** – a neurotransmitter that promotes feelings of happiness and satisfaction. Low serotonin levels make us depressed and anxious.

The good news, though, is that we can eat foods that not only stimulate the production of serotonin but also increase the body's level of endorphins – these are substances that produce a 'natural high'. These foods contain a chemical called tryptophan, and include meat, fish, beans, eggs, cheese, nuts, seeds, oats and, best of all, chocolate. It has

#### Serotonin

a neurotransmitter that plays a part in the regulation of sleep, appetite, and mood.



been found that people who ate one bar of chocolate a day felt happier, compared with people who ate no chocolate at all. Endorphins are also released when we exercise and when we are in love!

So apart from making sure that we eat a balanced diet and take part in regular exercise, plus if possible having a regular supply of chocolate and love, what can we do to make our brains happy? The work of Richard Davidson et al. (2000) at the University of Wisconsin in America has proposed that happy and unhappy brains show different areas of activity, and we can take action to increase the activity in the areas linked to feelings of happiness.

### Brain activity and happiness

Previously the most frequently used way of measuring happiness had consisted of simply asking people how happy they were. While this is a reasonable and useful way to try to measure happiness, it cannot be said to be very exact. After all, if two people both say they are moderately happy, we are still not sure that they are really experiencing the same level of happiness. Davidson used a technique called an **EEG** (full name electroencephalograph). An EEG is a way of measuring which parts of the brain are active and which are not. When a part of the brain is active, it generates electrical activity which can be picked up by electrodes placed on the scalp (Figure 12).

#### EEG

(electroencephalograph)  
the recording of  
electrical activity in the  
brain by placing  
electrodes on the scalp

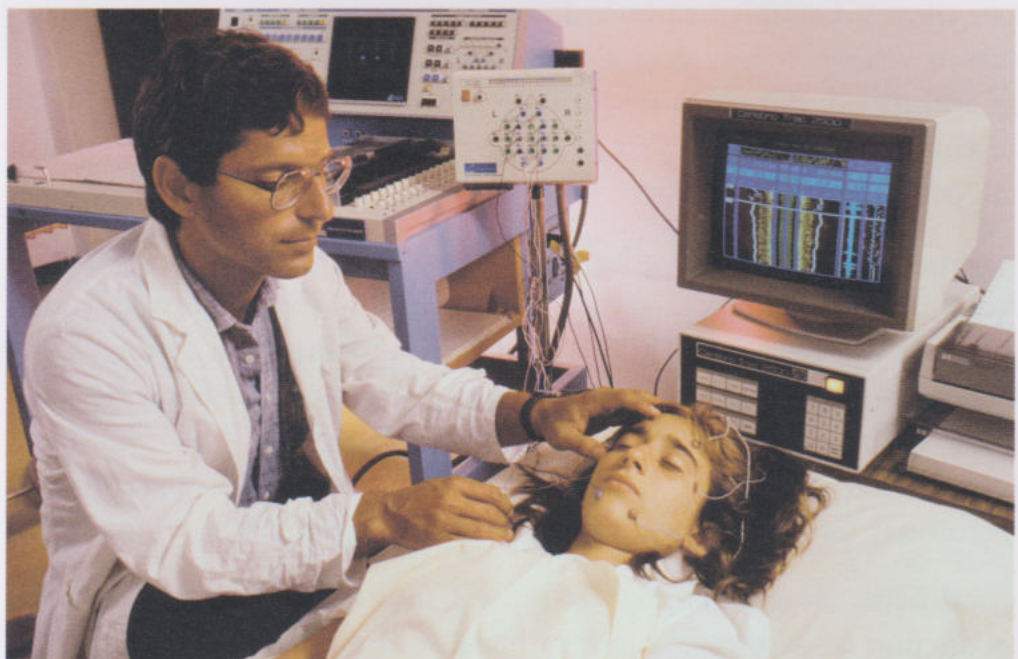


Figure 12 Person having an EEG



What Davidson found is that when people report that they are feeling positive and happy, they show more activity in the front of the brain on the left-hand side, and when they report negative feelings, there is more activity in the front of the brain on the right-hand side.

The question of cause and effect is relevant here, as it is in so many areas of psychology. Is the activity on the left side of the brain the cause of happiness or the effect of happiness? In other words, are people happy because their left front brain is active, or is the left front brain active because they are happy?

The answer, as so often in psychology, is that it's probably a bit of both. It does appear that some people have a higher tendency to show more left brain activity than other people, and correspondingly these people report higher and more enduring levels of happiness regardless of their life experiences.

We can even see differences in brain activity in newborn babies; at 10 months a baby whose brain is more active on the left side is less distressed when the mother disappears for a moment than a baby whose brain is more active on the right side. At two and a half years old, a left brain active toddler will explore a new situation while a right brain active toddler will stick close to mother. This early behavioural difference between young children does appear to suggest that to some extent we may inherit our happiness level, and further research has supported this suggestion.

However, this does not mean that some of us are born to be happy whereas others are born to a life of gloom and misery. What we inherit is a **genetic predisposition** to a certain level of happiness. Other factors to do with our environment and behaviour will determine our ultimate level of happiness. After the age of about three years old, children will start to show changes in their left/right brain activity and characteristic happiness level as a result of their experiences.

**Genetic predisposition**  
an inherited factor that increases the likelihood of a person displaying a particular characteristic

At the beginning of this chapter it was stated that psychologists studying the brain are interested in how the activity of the brain influences our thoughts, feelings and behaviour, and also how our thoughts, feelings and behaviour could influence the activity of the brain. It is this second aspect, or plasticity, of the brain that you will focus on next.

Davidson teamed up with Jon Kabat-Zinn (2003) to investigate the effects of meditation on right and left front brain activity. Dr Kabat-



Zinn had already been using meditation with patients who had various kinds of chronic diseases, and he found that they were better able to cope with their symptoms after meditation training.

Davidson and Kabat-Zinn carried out an experiment on a volunteer group of highly pressured workers. They randomly divided the volunteers into two groups: one of the groups received meditation training straight away, and the other group were told that they would receive their training later. The workers who received the meditation training straight away were given eight weeks of training and encouraged to practise by themselves between lessons.

The results were striking as the people who had received the meditation training were significantly happier than those who were still waiting for training; their brain activity level had shifted towards the left. Also, when both groups were given a flu vaccination, the people who had received the training developed a stronger immunity to the flu virus than those who had not.

Findings such as this suggest that we can train ourselves to be happy. We could do this by taking up meditation, but as you will see in the following chapters, there are other strategies that we can practise. The important message here is that while your brain is fundamental in directing your thoughts, feelings and behaviour, you can control your thoughts, feelings and behaviour and alter the way your brain operates so that you can live a happier life.

## 2.7 Learning skills – reading and note taking

The two most basic and important skills of a successful student are being able to read actively and make clear, concise notes. In this section you'll consider two different reading strategies – skim reading and close reading – which can be used at different stages in your study. You'll then take a look at a range of note-taking strategies.

### Reading strategies

You probably already have different reading strategies depending on the purpose of your reading. For example, you might browse through a newspaper or magazine looking at the headlines and pictures, but when you see an article that looks interesting you would change your strategy and read it carefully. You can apply these strategies to your studies.



- **Skim reading** This is useful when you are looking at a text for the first time or are looking for a specific piece of information. When you first look at a section or a chapter of a textbook, it is worth flicking through quickly looking for the main features, such as headings, subheadings, diagrams, tables and summaries. This will give you an initial idea of what is going to be covered and the main points to look out for. You might even make some initial rough notes of the overall structure of the chapter.
- **Close reading** When you close read, you read the text carefully; you will sometimes need to read the text more than once to identify all the key points. It is at this stage that you may want to start to make more detailed notes as you identify the important points.

### Note-taking strategies

The process of writing notes can help you engage with learning materials in an active, reflective way. Turning a text into your own words helps sharpen up your understanding and focus your thinking. The key to successful note taking is to create notes that suit your purpose rather than writing reams and reams which are boring to write and even more boring to read later!

- **Marking up a text** Although you might not think of this as note taking, marking the text as you read can be a very useful part of the note-taking process. You can mark up the text by using a highlighter pen or underlining key points, or by making notes in the margin. However, try not to overdo it and only highlight important points.
- **Linear notes** This is the most common form of note taking. Did you use this form of note taking in Activity 3? It involves writing in sequence the points you want to note. As with all note taking, the aim is to pick out and record the most important points. Avoid at all costs simply writing out most or all of the text again. Try to write your notes in your own words as this will help you understand what you have been reading about. Also add a reference to which page(s) of the text your notes refer so you can easily find your way back to the relevant part of the text. Figure 13 is an example of some linear notes on the structure of the brain outlined in Section 2.2.
- **Mind maps** Mind maps or spider diagrams have become popular in recent years; if you haven't tried this way of making notes, it is well worth giving mind mapping a try. When making a mind map you generally put the central topic in the middle of the page and then arrange the different aspects of the topic around it. However,



The Brain (pp. 9 – 11)
Complex organ of approx 100 billion neurons
Structure & function influence thoughts, feelings and behaviour
Plasticity - thoughts, feelings and behaviour influence structure and function
2 hemispheres linked by corpus callosum
Three layers:
Inner – central core - basic functions heart rate, sleep, reflexes
Middle – limbic system – emotions
Outer – cerebrum/cerebral hemispheres – covered by thin cortex controlling thought memory language
Neurons communicate by releasing neurotransmitters

Figure 13 Linear notes

you can give free rein to your creativity with mind maps. There are no hard and fast rules – try experimenting with different colours or even pictures if you have artistic skills. Mind maps do give you a clear visual representation of the relationship between points or ideas, and many people find that the effort that they put into constructing a mind map is enough to fix the information in their memory. Figure 14 is a very simple mind map of the structure of the brain outlined in Section 2.2.

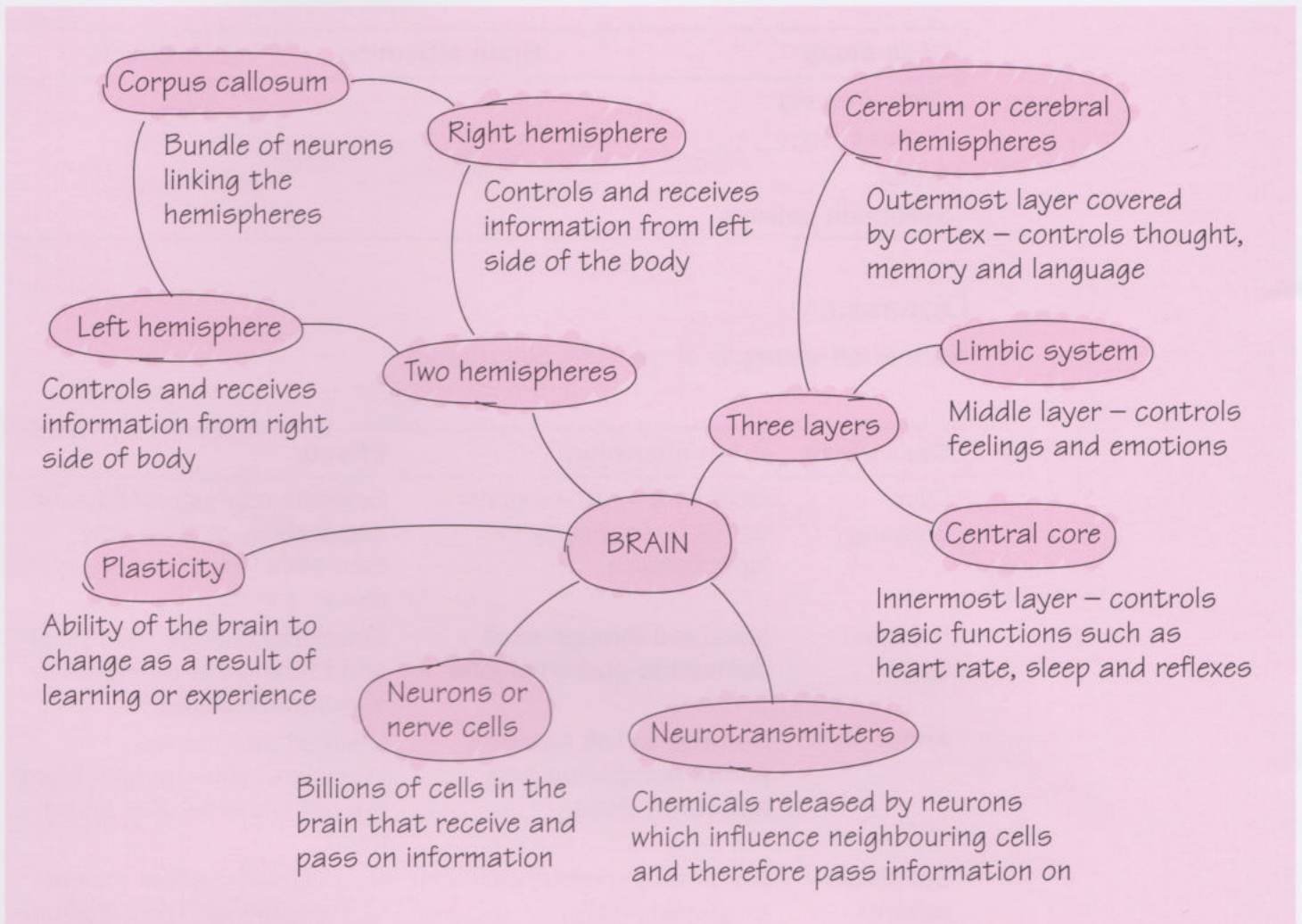


Figure 14 A mind map

- **Tables** Using a table or just a set of columns can help you to analyse information and ideas. You can vary the number of columns and rows as needed.

## Activity 7 Completing a table

Allow about 20 minutes

Look back through this chapter at the case studies of Clive Wearing, Phineas Gage, Arthur and the split-brain patients, and complete a table like the one below.



Case study	Brain alteration	Effects
Clive Wearing		
Phineas Gage		
Arthur		
Split-brain patients		

## Discussion

Here is an example of the completed table.

Case study	Brain alteration	Effects
Clive Wearing	Cold sore virus – extensive damage, especially to hippocampus	Episodic memory mostly lost and inability to form new memories. Procedural memory intact
Phineas Gage	Metal rod through skull – damage to prefrontal lobe	Emotional change from quiet and responsible to impulsive and bad-tempered
Arthur	Damage to link between parent recognition and emotional areas	Claimed parents were impostors when he saw them but not when he only heard them
Split-brain patients	Cut through corpus callosum to alleviate epileptic seizures	No noticeable effect except in experiments. Word flashed to right hemisphere can't be named but left hand can pick hidden corresponding object. Vice versa for left hemisphere

- Glossaries** A glossary is a list of specialist or technical words with definitions. Many textbooks have a glossary, and there is one at the back of this book for you to refer to. However, it is often useful to compile your own, which you can continue to update throughout your studies. It gives you one place in which to record all of the key technical terms you come across. If you just put these new terms in the main body of your notes, they will be harder to find than if they are in a list dedicated to such terms. A computer can be very useful in creating these kinds of notes as it allows you to reorganise your notes when you need to.

## 2.8 Conclusion

Although this chapter has only skimmed the surface of how our biology, specifically our brain, can affect who we are, we hope that you will have seen how a study of biology can contribute to our understanding of people. You will have seen that the brain is a highly complex organ and that one simple function such as remembering what we had for breakfast or recognising a friend can involve several areas of the brain.

You have seen that we have different types of memories that involve different systems in the brain for forming memories and recalling events, facts and skills. In order to make appropriate emotional responses, we rely on a whole integrated set of systems in the brain, and a fault anywhere in the system can prevent an appropriate response. Also, while the two hemispheres of the brain look similar, there are some differences. For some functions, such as speech, one hemisphere can dominate the other.

Investigations of the brain have an important role in helping us to understand people. However, if you asked a psychologist why an individual thinks, feels or acts in a certain way, you would probably want more of an answer than 'because of the action of a number of neurons in the brain'. In the next chapter you will look at another way in which psychologists investigate people: you will consider the role our thoughts have in making us who we are.



## 3 It's the thought that counts

### 3.1 Introduction

The previous chapter looked at the brain and you read about how the brain can affect thoughts, feelings and behaviour as well as how thoughts, feelings and behaviour can affect the brain. This chapter will concentrate on thinking and specifically how we organise our thoughts, how we make sense of our world and how we remember (or sometimes forget) what is relevant.

Psychologists who study thinking are working in the area of **cognitive psychology**. Cognition means knowledge, so cognitive psychologists are interested in what knowledge people have, how they have acquired this knowledge and how they use this knowledge. This means that the areas studied by cognitive psychologists include attention, perception, memory, problem solving and language.

**Cognitive psychology** the branch of psychology that studies the mental processes involved in perception, learning, memory and thinking



Figure 15 Rodin's thinker

Thinking is perhaps one of the most difficult of all psychological processes to describe. Much work has gone into studying thinking in terms of people's minds working as information-processors akin to computer programs. To this end many computer programs have been developed which emulate people's thinking (for instance, computer chess programs).

While increasingly sophisticated computer models of thinking have been helpful in showing the information-processing capacity of human brains, psychologists admit that these programs still cannot fully emulate the way we actually think. Human thinking involves more than the logical deductions of the computer. Psychologists recognise that thinking cannot be separated from a person's perception, emotion, motivation, imagination, intuition, memory, perspective and experience. The whole person – body and mind – in fact! A first step in our exploration of thinking is to consider what we actually do when we think.

---

### Activity 8 How do you think?

Allow about 10 minutes

Take a few minutes to write down a description of what is going on inside your mind when you are thinking about the following:

- 1 A conversation that you have had recently
- 2 A tree
- 3 Happiness

Remember you are not being asked just to describe what you are thinking about. You also need to try to describe how you are thinking about it.

### Discussion

You may have found this activity quite difficult. Although we are thinking all the time, we are rarely asked to think about how we think. Most people report that they silently talk to themselves or have a running conversation with an imaginary other person. Quite often people will also add that they see pictures or images in their head, sometimes in addition to the inner dialogue, but sometimes this is more of a silent movie.

So when you were asked to think about a recent conversation, did you mentally rerun the gist of what you said and what the other person said? Was this accompanied by a vague picture of you and the other person in a particular setting? What about the tree – did you see a picture of a tree, and was it a specific tree like an oak or more like a general all-purpose tree such as a child might draw? Happiness as an abstract concept is even more difficult to pin down. Perhaps you saw smiling faces or thought of other related words like joy or contentment, or even saw a picture of yourself at a time when you were particularly happy.

---



**Semantic thought**

thinking based on words and meaning

**Iconic thought**

thinking based on using mental images

**Enactive thought**

thinking based on impressions of actions

Whatever your answers to the activity above, we hope that you have seen that your thinking involved both words and images. These two ways of thinking are referred to in psychology as **semantic thought** (the inner conversation or thinking in words) and **iconic thought** (the mental images or thinking in pictures).

Psychologists have also identified a third way of thinking, **enactive thought**, which is used when we represent some things as mental movements. The best way to explain this type of thought is to think of a well-practised skill such as driving a car, using a keyboard or tying your shoelaces.

Try asking a friend to describe to you how to start a car, and you will probably find that they perform the actions as they try to put the actions into words. It is as though we don't hold this sort of information in our heads but we store it in the muscles involved in the actions. Can you see how this type of thinking relates to our procedural memory – our memory of how to do things – that was considered in the previous chapter?

Section 3.2 will consider how an understanding of the way that we organise our thoughts can help us to improve our memory. However, in Section 3.3 you will also see that the way that we organise our thoughts can sometimes lead us to false conclusions. Section 3.4 will focus on the way that we think about other people, events and relationships in our social world. Section 3.5 will discuss how the way that we think about the world can influence how happy or unhappy we feel. In Section 3.6, the learning skills section, you'll be introduced to the skills of planning, structuring and writing essays.

**The aims of this chapter are to:**

- identify the ways that we mentally organise our thinking
- consider how organisation of thought can lead to both improved memory and distorted memory
- explore the ways that we organise our thoughts about other people
- consider how the way that we think about the world can influence how happy we feel
- introduce the skill of essay writing.

## 3.2 Organisation and improved recall

Organising our thoughts involves:

- using mental images
- forming concepts (putting information into categories)
- developing schemas (constructing mental packages of related information).

This section looks at these three types of organisation in more detail.

### Using mental images

As adults, we tend to do most of our thinking in words – that is, we mainly use semantic thought. However, numerous experiments have been carried out that support the suggestion that we will remember verbal or written information better if we also form a mental image of the information.

The mental image will give us another cue when we come to recall the information. In addition, the effort we make in forming the image will help to fix it in our memory. This works best if the images we form are large, colourful and bizarre, as we tend to remember distinctive items rather than everyday items.

Using mental images when you first start to learn a new language has proved very effective for helping people to grasp basic vocabulary. This is the key word technique. For example, take the French word 'poubelle' (pronounced pooh-bell) which translates as 'bin' in English.

The first step is to think of an English word or words that sound like the French word or part of the French word. This will give you your key word. Then you make a mental picture of the key word with the English translation. So in this example you could picture yourself lifting the lid off your bin which has turned into a bell and holding your nose because of the 'pooh' (Figure 16).

This might sound complicated, but doing it is much simpler than describing it. It is very successful as well as being a lot less effort and more fun than learning lists of vocabulary by repeating the words over and over again.

Michael Raugh and Richard Atkinson (1975) developed this key word technique and carried out an experiment on two groups of participants. The participants were asked to learn a list of 60 Spanish words, but





Figure 16 La poubelle

only half of them were taught to use the key word technique. When they were tested later, the participants using key words scored an average of 88 per cent, compared with only 28 per cent for the participants who did not use key words.

In Chapter 1 you were given a brief outline of experiments, and this study by Raugh and Atkinson is a good example of a simple experiment. The experimenters had two groups of participants and they manipulated one difference between the two groups. The experimental group were taught to use key words and the control group were not. Both groups were then given a memory test.

In experiments, the thing that the experimenter manipulates is called the **independent variable**, and the thing that the experimenter measures is called the **dependent variable**.

When researchers design experiments, they need to consider whether any other factors or variables might be influencing their results. It is important that the experimenter tries to eliminate or control these variables to get the most reliable results.

**Independent variable**  
a variable that the experimenter manipulates

**Dependent variable**  
a variable that changes as a result of the manipulation of the independent variable and is measured by the experimenter

---

## Activity 9 Identifying variables

Allow about 5 minutes

In the Raugh and Atkinson experiment, can you identify the following variables?

- 1 The independent variable
- 2 The dependent variable
- 3 A variable that should be controlled

### Discussion

- 1 The independent variable is the variable that the experimenter manipulates, so this is the instruction to use the key word technique.
  - 2 The dependent variable is the variable that alters as a result of the manipulation of the independent variable. The experimenter measures this variable, and it is the number of Spanish words recalled.
  - 3 One variable that the experimenter might need to control is to make sure that none of the participants had learnt any Spanish before the experiment as this could affect their score on the memory test.
- 

A number of **mnemonics** or memory strategies are based on using mental images. A mnemonic is a strategy for improving memory, and you are probably familiar with several mnemonics, such as the rhyme '30 days hath September, April, June and November, all the rest have 31, except February which has 28 ...', or 'Richard Of York Gave Battle In Vain' to remember that the rainbow is made up of Red, Orange, Yellow, Green, Blue, Indigo and Violet.

An ancient mnemonic device called the 'method of loci' was developed by the poet Simonides who lived in Ancient Greece in the year 500 BC. This technique works by the learner linking mental images of the items that they are trying to remember with a sequence of locations that they already know.

---

## Activity 10 Method of loci

Allow about 10 minutes

Let's take a simple example. Suppose that you want to remember a list of ten items that you need to shop for (Figure 17).

You would imagine each of these items at various locations around your home or placed at different points down a street that you know well.

### Mnemonic

a technique for improving the memory



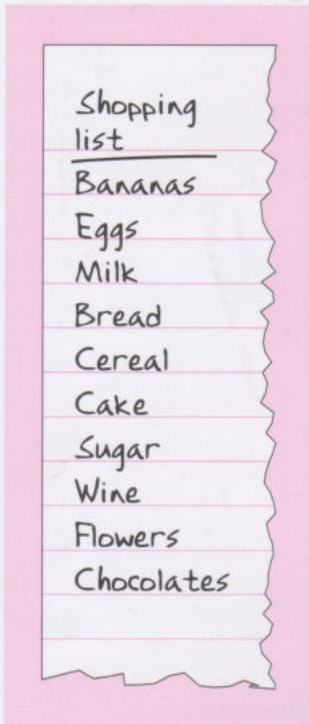


Figure 17  
A shopping list

Remember that this technique works best if the images are outstanding and silly rather than sensible. We have suggested some images for our list in the passage below (see Figure 18). Please read through the passage and take a moment to make the mental pictures, but don't worry too much about trying to remember the items. However, it is very important that you do make the picture in your mind.

Try to imagine your front door but with a huge **banana** instead of the usual handle. When you open the door and walk into the entrance hall, the floor is covered in **eggs** and you have to walk over the eggs to get to the living room. Imagine the eggs cracking under your feet and the mess! Anyway, it gets much messier because when you open the living room door you are almost knocked off your feet by the river of **milk** that comes gushing out. You stagger over to the window to pull the curtains, which have turned into two giant slices of **bread**. You try to turn on the TV but you can't because that has been replaced by a very large packet of **cereal**. Time to have a sit down, but when you collapse on the sofa, you sink down into a sofa-sized ginger **cake**. You go to the kitchen for a drink. Walking across the kitchen floor is a bit difficult as it is knee-deep in **sugar**, and when you have reached the kettle, you find that it has turned into a bottle of **wine**. We prefer white but you can visualise red if you want. Give up and go for a mug of water. Unfortunately, when you reach down a mug from the cupboard it is filled with a bouquet of **flowers**, and when you turn on the tap it is **chocolate** not water that comes out.

## Discussion

Leave the shopping list now for at least an hour and in the meantime try not to keep checking whether you have remembered the items. You will probably find that an hour or so later you will be able to remember most of the items on the list. You may even find that a few days later you will still be able to recite most of the list.





Figure 18 Your shopping

This is a fairly trivial example and most of us would just write down our shopping list. However, we hope that it has demonstrated that making mental images can be a powerful aid to memory. The technique can be adapted for other more relevant situations. It has been tested on students revising for exams, where it has been found to improve recall. For example, if you had to take a psychology exam, you could make up mental images of some of the research you have read about and arrange these images in a logical sequence which takes place around your home.

Using mental images to organise our thoughts can make our thinking and remembering much more efficient. However, there are other organising principles which can also be useful, such as sorting information into categories.



### Concept formation

the process of making a mental representation of a group of objects or events that share similar properties

## Forming concepts

When we think about the world, one of the ways that we organise our thoughts is by putting them into categories. This process of developing categories is called **concept formation**. For example, 'animal' is a concept that contains other sub-concepts and then further sub-concepts. We could divide animals into birds, fish, mammals, etc. We could then divide birds into robins, sparrows, owls, etc. When we apply our concepts, we tend to use a set of defining features. For example, we would classify the sparrow as a bird because it has a number of defining features that we associate with birds, such as wings, feathers, beaks and flying. However, although we may have a set of defining features for a concept such as a bird, we don't apply these rigidly. Penguins and ostriches are still classified as birds even though they don't fly.

---

### Activity 11 Defining a simple concept

Allow about 5 minutes

What makes a table a table? We all have a concept of what a table is and can easily recognise a table, whether it is a dining table, garden table or coffee table. Take a moment to write a list of the defining features of a table.

### Discussion

Most people when asked this relatively simple question will tell you that a table has a flat surface and four legs to raise it off the ground, and you can put things on it. They may add other features such as it is an item of furniture or it is often but not always made of wood, but the first three features are the most frequent responses.

---

So, we all know what a table is: a flat surface with four legs that we put things on. However, look at Figure 19.



Figure 19 A non-typical table

The table in Figure 19 doesn't have four legs but most of us would still recognise it as a table as it has a flat surface that we can put things on.

Similarly, our definition of a table as a piece of furniture with a flat surface with four legs could just as easily be applied to a stool (Figure 20).

While we would find it difficult to specify a way of distinguishing between a small occasional table and a stool, we would not walk into someone's living room and sit on their occasional table because it shares the same features as a stool. So our concepts are not clearly defined and seem to depend on what we expect to do with objects rather than how we define them. You may have heard the phrase 'fuzzy concept' which reflects our difficulty in providing precise definitions.

So we recognise the object in Figure 19 as a table because we could use it to put things on, such as a book, a drink or an ornament. The object in Figure 20 is a stool because we would sit on it. We group objects within the same category or concept if we do the same thing with them.

We use concepts so automatically that we are rarely aware that we are using them. Perhaps it is easier to see this process in action when we observe children developing their thinking as they struggle to develop concepts. Children often make mistakes by **overgeneralising** a concept that they are trying to get to grips with. They may have developed a concept for a dog as an animal with hair, four legs and a tail, but then



Figure 20 A stool

**Overgeneralisation**  
extending the use of a word or concept to include objects or events that are similar but do not commonly belong to the concept



they may also apply this label to a cat or a sheep or even a horse. Similarly, they may learn that the tall person with the deep voice is called Daddy, and then embarrassingly identify any passing man as Daddy.

It may also become evident how much we use concepts when we look at a few memory experiments. Try an experiment for yourself in the next activity.

---

## Activity 12 A memory test

Allow about 10 minutes

Read once through the list of words below, trying to remember them, and then cover the list. Now write down as many words as you can remember. Once you have done this, keep the original list covered and read on beyond the list.

Bed	Sock
Peach	Daisy
Hat	Strawberry
Armchair	Table
Daffodil	Buttercup
Shirt	Apple
Rose	Sideboard
Lemon	Trousers

## Discussion

Now that you have written down all the words that you can recall, see if you can remember any more words with the help of some cues. The list contains items belonging to the following categories: furniture, fruit, clothing and flowers. Have the cues helped you to remember any more words?

Have a look at your first try at recalling the words. Did you realise that the words belonged to categories, and did you recall them in category clusters?

If possible, you could try this out on some other people and compare their results with yours.

---

This experiment is a simplified version of an experiment by Weston Bousfield (1953). Bousfield asked participants to learn a list of sixty words that could be divided into four categories. Though the words were presented in a random order, the participants tended to remember them in groups which belonged to the same category, so if a participant remembered the word apple, then they would also remember the words peach, lemon and strawberry.

In our version of the experiment you were also asked to have a second go at recalling the words after you had been given the category headings. Most participants in these types of experiments find that although they think that they have recalled all the words they will be able to remember, they can actually access more words once they have been given category headings as cues.

This illustrates that this information must have been available but without the cue they could not access it. When we try to recall information that has been organised, it seems that each bit of the information cues the next bit because we have it stored in an organised rather than haphazard fashion.

Some research from George Mandler (1967) suggests that by organising information we learn it even though we are not making any effort to memorise it. Mandler carried out an experiment where two groups of participants were given a pack of 100 cards each. Each card had a word printed on it. Both groups of participants were told to sort the cards into groups. They were allowed to have several tries at sorting the cards. The only difference between the two groups of participants was that the first group were told to try to memorise the words on the cards while they were sorting them but the other group were told only to sort the cards. When both groups were later tested by being asked to write down all the words they could remember, the group who were told only to sort the cards remembered as many words as the group who were told to sort and memorise the words.

---

### Activity 13 Identifying variables again

Allow about 5 minutes

In the Mandler experiment, can you identify the following variables?

- 1 The independent variable
- 2 The dependent variable



## Discussion

- 1 The independent variable is the variable that the experimenter manipulates, so this is the instruction to try to memorise the words which was given to one group only.
  - 2 The dependent variable is the number of words recalled.
- 

You may rightly argue that being able to remember lists of words in category groups is not a particularly useful skill for everyday life. However, the principle of organising information so that it is grouped with related items can be applied to activities like reading this book. In the learning skills section at the end of the previous chapter we looked at mind mapping as a note-taking strategy. Mind mapping is simply a way of organising information so you can see which items go together and how they are related to other items.

You may also remember that in that section we advised you to skim read a chapter of the book first to get an overall idea of what is going to be covered. The titles, subtitles, bullet point lists and diagrams can help you see how the chapter has been organised. Keeping this organisation in mind can be a useful aid to study. You can start out with a rough sketch of how the chapter is organised and then add to it or amend it as you do your close reading.

We'll now look at a third way of organising our thoughts which is very similar to concept formation but is more extensive, namely using schemas.

## Schemas

### Schema

a mental framework of knowledge developed as a result of experience

A **schema** is the word psychologists use to describe a mental framework in which you would file all your knowledge about certain objects, situations, groups of people and even yourself. It would include the whole package of your thinking when you think about something. For example, if you apply concept formation to the word dentist, you would probably categorise dentist as an occupation. However, if you list everything that you associate with the word dentist, this would give you your dentist schema. Your schema may include items such as a waiting room, dread, a dentist's chair, the sound of the drill, the smell of the antiseptic mouthwash, and so on.

The term schema (plural schemas or schemata) was used by an influential Swiss psychologist named Jean Piaget. Piaget, who died in



1980, spent over 50 years investigating the ways in which children develop their thinking or cognitive skills. He proposed that they do this by developing schemas which are built up from their experience of the world.

It is as if your memory is a huge filing cabinet and each file in the cabinet is a schema. If you opened the schema labelled 'going to the cinema', it would contain all your knowledge about trips to the cinema (e.g. buying a ticket, sitting in the dark, seeing a film, other people around, eating popcorn). If you visited a cinema that you had never been to before, you wouldn't have to start from the beginning in trying to work out what to do. You would simply activate your 'going to the cinema' schema to guide your actions. In this way schemas help us to deal more efficiently with the world around us so when we encounter a new situation we can apply our knowledge of similar past situations to help us to act appropriately.

A lot of the knowledge that we hold in our schemas will be shared with other people who have had similar experiences. However, where our experiences are different, our schemas will also be different. For example, if you love football, your schema for football will contain a lot of detailed information about particular teams, leagues, championship competitions and even the intricacies of the offside rule. If you dislike football, your football schema may only include the information that it is an outdoor game involving a ball, a number of players and an audience, and that you should avoid it whenever possible.

Schemas can help us to recall information as they provide an organising framework so that the information is stored appropriately, and they can provide cues to prompt our memory.

John Bransford and Marcia Johnson (1972) carried out a number of experiments which illustrated the role of schemas in our understanding as well as our recall of information. In one experiment the participants were read the passage below and then asked to recall it as accurately as possible. However, half of the participants were given a title for the passage, and the other participants were given the passage without the title:

The procedure is actually quite simple. First you arrange things into different groups. Of course, one pile may be sufficient depending on how much there is to do. If you have to go somewhere else due to lack of facilities that is the next step,



otherwise you are pretty well set. It is important not to overdo things. That is, it is better to do too few things at once than too many. In the short run this may not seem important, but complications can easily arise. A mistake can be expensive as well. At first the whole procedure will seem complicated. Soon, however, it will become just another facet of life. It is difficult to foresee any end to the necessity for this task in the immediate future, but then one never can tell. After the procedure is completed one arranges the materials into different groups again. Then they can be put into their appropriate places. Eventually they will be used once more and the whole cycle will have to be repeated. However, that is part of life.

(Bransford and Johnson, 1972, p. 722)

Most people report that they have great difficulty in understanding the passage, let alone trying to recall the details. However, if you reread the passage with the title 'Washing clothes' in mind, everything should fall into place. The title provides a schema so that the information can be stored appropriately and recalled more easily.

In the next section you'll see how this same principle of organisation can lead to distortions in perception and recall.

### 3.3 Organisation and distorted recall

While schemas help us to deal with the world and the other people in the world more efficiently, they can also lead us astray. The information in our schemas may set up expectations which make our world more predictable and comfortable. However, once we have expectations, we may see or attend to only the things that we expect and ignore any information that does not fit with our schemas. We may even infer missing bits of information so that what we remember is not totally correct but is compatible with our schemas. Can you see that although we use our experience to develop our schemas, our schemas may also determine what our experience will be? If our schemas direct us to pay attention to some information and ignore other information, this will determine the experiences that we have. Ulric Neisser's (1976) perceptual cycle (Figure 21) illustrates how a schema directs exploration, which then determines which information is sampled, which in turn modifies the schema.

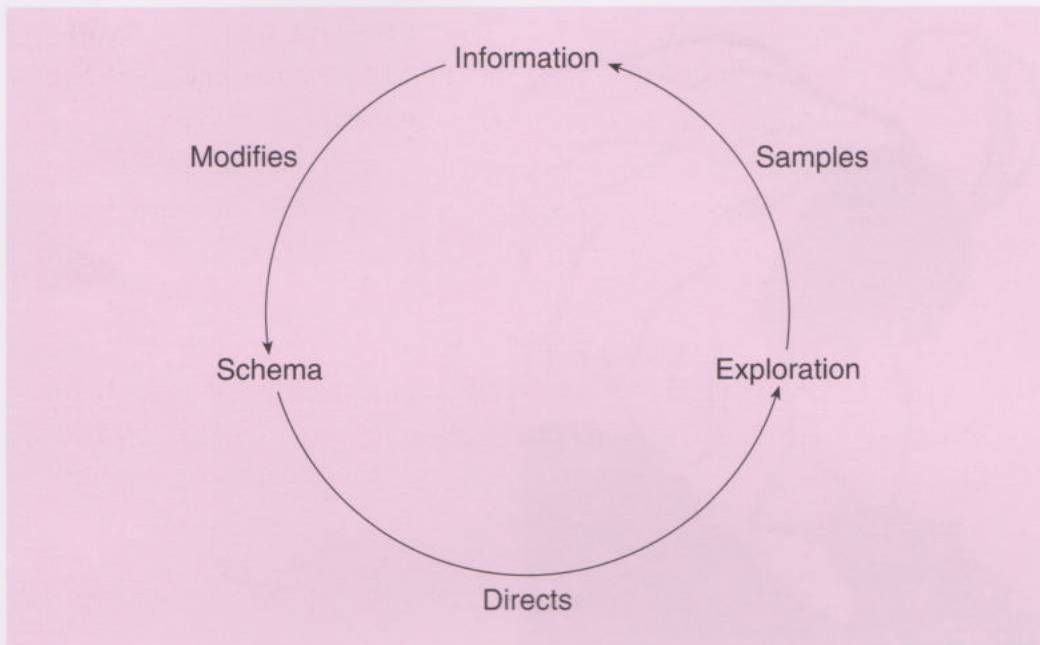


Figure 21 Neisser's perceptual cycle

In this section you'll look at two examples of how our schemas can lead us astray:

- perceptual set – seeing what we expect rather than what is there
- reconstructive memory – how previous knowledge can distort our recall.

## Perceptual set

Our senses pick up information from the outside world, but then we have to interpret this information to make sense of it. There is a difference between **sensation** – the initial registration by our senses of information from the world about us – and perception – the interpretation of this information. To see for yourself the difference between sensation and perception, look at Figure 22.

### Sensation

the initial registration by our senses of information from the world about us





Figure 22 Leper's ambiguous lady

This picture is one sensory input, but is capable of two different perceptions. Within the picture there is a young lady and an old woman. You might not be able to see both interpretations straight away, but keep returning to the picture and you should eventually be able to see both figures (you can never see both figures at the same time – only alternate between them). If you are completely stuck and can see only one of the figures, look at the two pictures at the end of this chapter.

Perception is very much an active process rather than just a passive reception of sensory data. Our perception of the world will be influenced not just by the sensations we receive from the outside world, but also by the context in which the sensory input occurs and by our past experience, attitudes, beliefs, values and emotional states. So perception depends on combining the information that comes from our sensory receptors (often called **bottom-up processing**) with stored information based on our past experiences (often called **top-down processing**).

**Bottom-up processing**

the processing of information about the world that flows up from the senses

Read the phrase in Figure 23:



**Top-down processing**  
the influence of  
information flowing  
down from stored  
knowledge based on  
past experience

Figure 23 What is written in the triangle?

Did you notice the second 'the'? If you didn't, this shows that what you perceived is different from what is physically present because your past experience of reading would lead you to expect one 'the'.

The context in which we see something can also lead to expectations. When you look at the letters and numbers in Figure 24, the central letter/number is exactly the same in both lists, but we interpret it as B in the letter list and as 13 in the number list.

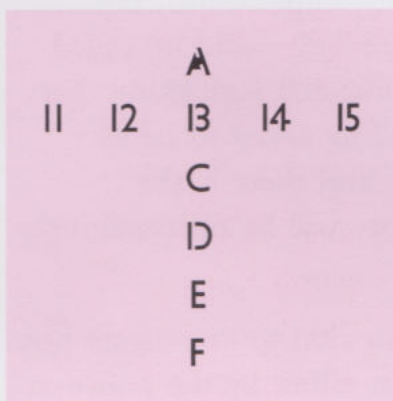


Figure 24 Context and expectation

So our schemas can influence the way that we interpret information. They can also lead us to reconstruct our memories so that what we recall is not what actually happened but a reconstruction of what happened that fits better with existing schemas.



## Reconstructive memory

William Brewer (1981) carried out a study that illustrates the distorting effects of schemas on memory. The participants were shown one at a time into an office and left to wait for 35 seconds. They were then taken to another room and given an unexpected memory test on the contents of the office. Most of the items in the office were compatible with an office schema, such as a desk, chair, notepad and calendar, but there were other objects present that would not fit an office schema, such as a brick and a pair of pliers. The participants had much better recall of items that were compatible with the office schema than of items that were not compatible. Participants also recalled items such as a telephone that were not present.

This study illustrates that when we recall information, we have often adjusted it so that it is consistent with our existing schemas. We don't recall some contradictory information, such as pliers and bricks, and we make inferences so that we remember an item that wasn't present, such as a telephone.

Our capacity to reconstruct what we remember because of our expectations or prior knowledge can have serious implications. For example, if you witnessed a crime or an accident, you could be called on to give eyewitness testimony. If you have witnessed something that leads to a police investigation or a trial, you will be asked to recall events that may have happened some time ago, and there is the possibility that some of the gaps in your memory will be unconsciously filled in by inferences.

When considering eyewitness testimony it is also vital to investigate how the witness has been questioned about the event either by the police or in the court. Elizabeth Loftus (1974, 1975) has carried out research to investigate the accuracy of eyewitness testimony. Loftus investigated the effect of the '**leading question**' on recall by showing participants films of a car accident. She then asked the participants to estimate how fast the cars were going when the accident occurred. However, some participants were asked 'how fast were the cars going when they hit each other?' and other participants were asked 'how fast were the cars going when they smashed into each other?' Participants given the 'hit' question gave an average estimate of 34 mph, whereas the participants who were asked the 'smashed' question gave an average estimate of 41 mph.

### Leading question

a question that suggests a particular answer by the way in which the question is worded

An even more subtle change in questioning also produced differences in recall. Some participants were asked 'did you see **a** broken headlight?', while others were asked 'did you see **the** broken headlight?' Participants who were asked about 'the headlight' were much more likely to report having seen a broken headlight compared with participants who were asked about 'a headlight', regardless of whether or not the film showed a broken headlight.

Loftus went on to show that significant errors in recall can be induced by using leading questions. Her work has highlighted the need for careful questioning of witnesses and a degree of caution before relying on eyewitness testimony as a basis for important decisions.

In the next section you'll look at how we use different types of social schemas when we try to make sense of our social world.

### 3.4 Thinking about our social world

Schemas will influence our thinking about a person by directing our attention to particular pieces of information, organising this information in a way that is compatible with our schemas, and influencing what we recall about the person. Schemas used in a social setting are often referred to as social schemas. When we meet someone for the first time, we will use our social schemas to try to place this new person in a category. There will be certain things that we want to know about this person that are more important than other items of information, and our schemas will direct our attention to the information that is most relevant to us. Once we have placed our new acquaintance into a category, we will assume all sorts of other things about them even if we don't have first-hand evidence. In this section you'll look at three aspects of thinking about other people:

- first impressions (the primacy effect)
- central and peripheral traits (some information about others is more important than other information)
- stereotypes (assuming characteristics on the basis of membership of a group).

#### First impressions count

When we meet someone for the first time, even before we start to interact with them, we tend to have unconsciously started to form an impression of what sort of person they are. This initial information



based on the person's physical appearance leads us to categorise the person as belonging to a particular schema. The initial information that we have is usually related to a person's gender, age, ethnicity, dress and physical attractiveness. From such sketchy information we will make inferences about other aspects of the person. For example, their clothes may suggest what sort of social class they come from or what type of job they have.

### **Halo effect**

a tendency to allow one particular characteristic to influence our overall impression of a person

One particularly important feature at this stage is how physically attractive a person is. There is a tendency to assume that if a person looks attractive, then they will have all sorts of other attractive qualities. This is an example of the **halo effect**, where we assume further knowledge about a person based on just one item of information. We can also be swayed by the horns effect, where knowledge of a single negative quality can lead us to assume that the person has a number of other negative qualities.

Numerous studies have found evidence for the halo effect of physical attractiveness. Attractive criminals tend to get less severe sentences; attractive children are more likely to be described as 'high-spirited' rather than 'naughty' when they have done something wrong; and attractive employees are more likely to get promotion and earn more money than their plainer colleagues. The positive power of being good looking does fortunately have its limits and can fade as we get to know a little more about the person. However, the information that we get first can be extremely powerful as it influences the way that we process information which comes later.

### **Primacy effect**

information that is presented first is recalled better than later information

This tendency to give more importance to first impressions and to give less weight to later contradictory information about a person is called the **primacy effect**. This effect was tested by Abraham Luchins as far back as 1957 and has been supported by several more recent variations of this study.

In the Luchins experiment, two groups of participants were given exactly the same information about a boy called Jim. The information consisted of two paragraphs, with Jim being portrayed as friendly and outgoing in one paragraph, and shy and retiring in the other paragraph. The only difference between the two groups of participants was that one group received the information that presented Jim as friendly first, followed by the paragraph that presented Jim as shy. The other group of participants was given the paragraphs the other way round.



Participants were then asked to rate Jim on a number of personality characteristics, which included friendliness: 78 per cent of the participants who had read the friendly information first rated Jim as friendly, but only 18 per cent of the participants who had read the shy information first rated him as friendly.

The primacy effect has implications in many real-life situations. Donald Pennington (1982) gave participants the summary of a criminal trial to read. Half the participants read the defendant's evidence first and then the prosecution evidence. The other participants read the same information but began with the prosecution case followed by the defendant's case. Participants were then asked to state whether they thought the defendant was innocent or guilty. Results were in line with the Luchins study above, with the participants who read the defendant's case first more likely to judge the person as innocent, and the participants who read the prosecution case first more likely to judge the person as guilty.

It is also worth bearing this in mind if you are going for a job interview. Try to look your best and don't say anything stupid in the first few minutes. Perhaps if you are hoping to get off with a caution or really do need a pay rise, you could do worse than listen to the advice from some of the television makeover shows advising us about what to wear in order to make the best impression we can. Mostly this is just light-hearted, undemanding TV, but when we see the transformed person at the end, it can be quite an emotional experience, at least for them. Sometimes helping a person to alter their appearance can have a profound effect as other people will react to them differently. This in turn can make them feel differently about themselves.

### Central and peripheral traits

A **trait** is a personality characteristic such as whether someone is generally outgoing or shy. As we have seen above, the order in which we obtain information about a person is important, but the type of information we obtain can also be important. Try the activity below to see what you would most like to know about a new acquaintance.

**Trait**  
a personality  
characteristic

---

### Activity 14 What do you want to know?

Allow about 5 minutes

Below is a list of personality traits. If you were about to meet someone for the first time, which traits would you like to have information on, and



which traits would you be less interested in? Put the list in order, from the one you would most like to know about to the one you are least interested in. Write a sentence or two to explain your choice.

Practical

Polite

Trustworthy

Friendly

Generous

Efficient

## Discussion

Did you want to know how trustworthy, generous and friendly the person is, and were you less interested in how practical, polite and efficient they are? Most people identify trustworthiness, friendliness and generosity as more important than the other personality traits. These traits seem to be central traits, and the other traits are peripheral traits. When we have information about central traits, we will often assume that the person has other qualities even though we have no information about these. Perhaps you reasoned that if someone is friendly and generous, then they are likely to also be polite rather than rude.

---

Solomon Asch (1946) identified the personality descriptions of warm and cold as central traits. He gave four groups of participants a list of personality traits of an imaginary person. Six of the traits were the same: intelligent, skilful, industrious, determined, practical and cautious. However, for each group he inserted a different seventh trait in the middle of the list. The additional traits were warm, cold, polite or blunt. Participants were then asked to rate this imaginary person on further traits such as generosity and humour.

Participants who received lists containing 'polite' and 'blunt' gave very similar ratings on generosity and humour. However, nearly all the participants who received the 'warm' description believed that the imaginary person would be generous and humorous. Conversely, the group who received the list including the description 'cold' rarely rated the imaginary person as generous or humorous. So warm and cold seem to be central traits as they affect the overall judgement of a person, while polite and blunt are peripheral as they have little effect on overall judgement.

Harold Kelley (1950) carried out a similar study but in a real-life setting. He informed a group of students that they were to receive a lecture from a visiting lecturer. He gave the students some information about

the lecturer, but told half of them that this person was rather cold, whereas the other students were told that he had a warm personality. The students who had been given the 'warm' description rated the visiting lecturer much more positively than those who had been given the 'cold' description. The 'warm' students were also more likely to engage in class discussions and to stay behind to talk to the lecturer when the lecture had finished. The results of this experiment are interesting because they indicate that descriptions may influence not only the way that we think about another person but also the way that we behave towards them.

## Stereotypes

A **stereotype** is a schema about a group of people where we assume that because a person belongs to a particular group or they have a particular feature, they will have all of the qualities that we associate with that group or feature. We base our stereotypes on things such as gender, sexuality, ethnicity, age, religion or occupation.

As we saw earlier, there are advantages in using schemas; similarly, stereotypes can also help us to deal with information about other people quickly and help us to remember relevant information. However, there are many disadvantages and even dangers associated with stereotypical thinking. You will read in Chapter 5 about how the use of stereotypes can foster prejudice and discrimination. However, another disadvantage is that stereotypes can distort our thinking so that we focus on information that confirms the stereotype and ignore information that does not fit. Try the activity below to see how stereotypes can sometimes distort our thinking to the extent that we cannot answer a very simple question.

### Stereotype

a schema about a group of people where we assume that a person will have all of the qualities associated with that group

---

## Activity 15 The boy and the surgeon

Allow about 15 minutes

Try out this story and question on some of your friends. I think you will be surprised how many people find it difficult to give the obvious correct answer.

### The story

A young boy was in a car with his father, who was driving, when they had a serious accident. The father was killed and the boy was seriously injured. The boy was rushed to hospital for emergency surgery. When he



was wheeled into the operating theatre, the surgeon looked down and said 'Oh no! It's my son'.

### The question

What is the relationship between the boy and the surgeon?

### Discussion

Many people will want to check again the details of the story to make sure that the father was killed in the car accident. They will often come up with explanations that they are obviously not satisfied with, such as the surgeon is a godfather or even grandfather. The reason that some people will struggle with this question is that they have a strong stereotype about a surgeon being a man, which blocks the obvious answer that the surgeon is the boy's mother.

---

This activity is a good illustration of a stereotype associated with an occupation. However, we may even have stereotypes linked to people's names. As names go in and out of fashion, we often make a judgement about how old someone is just on the basis of their name. An extreme example of the dangers of applying stereotypes to names comes from the Ashanti people of West Africa (Jahoda, 1954). Within this society it was the custom to name children according to the day of the week on which they were born. There was also a belief that the day of birth has an effect on personality. Children born on a Monday were thought to be calm and gentle, unlike children born on Wednesdays who were wild and aggressive. An examination of the police records in the 1950s revealed that very few of the juvenile delinquents had been born on a Monday and most of them had been born on a Wednesday. This is an example of a **self-fulfilling prophecy**. Ashanti people shared a schema for Wednesday-born young boys that led them to expect aggressive behaviour. If these young boys were consistently treated as potential troublemakers, they would eventually come to behave in a way that was consistent with the expectations that others had of them.

### Self-fulfilling prophecy

a process by which expectations about a person come true because other people treat them according to expectations

The power of the self-fulfilling prophecy is illustrated in a study by Robert Rosenthal and Leonore Jacobson (1968) which was called 'Pygmalion in the classroom'. They selected a school and gave all the children between the ages of six and eleven years an IQ test (to measure intelligence). They then told the teachers that some of these children were 'high flyers'. In reality these children were no different from the rest of the class and were just selected randomly. A few months later the researchers retested the children and found that the



'high flyers' showed a greater increase in their IQ test score compared with the other children.

The findings were explained by proposing that the teachers' expectations of the 'high flyers' had changed so they paid more attention to good work, gave fuller explanations and set more challenges. This different treatment led the children to respond in line with the expectations and to achieve more.

So it seems that the way that we think about other people and how we stereotype them can shape their behaviour. In the study above, the labelling of some children as 'high flyers' had a positive effect, but it is clear that this process of labelling can also produce negative effects such as seen in the Ashanti Wednesday-born children.

### Pause for thought

Perhaps you can think of some examples where the way other people thought about you and responded to you has shaped your behaviour. Did a teacher ever ask you not to sing out loud when it was your class's turn to lead the school assembly? If so, your schema about yourself may include the item 'not a good singer'. Maybe you find that you are the one that all your friends come to when they have a problem. In this case your self schema may include 'a sympathetic listener'.



## 3.5 What makes us happy – happy thoughts

There is nothing either good or bad, but thinking makes it so.

(Shakespeare, *Hamlet*)

How can the way that we think influence how happy we feel? As the Shakespeare quote above suggests, the way that people think can make a situation seem good or bad. Have you heard people described as someone whose glass is always half full or someone whose glass is always half empty? They may both be in the same situation, but the way that they think about that situation means that one of them will have a



positive, optimistic outlook on life and the other will have a negative, pessimistic outlook.

Optimists have been found to be healthier than pessimists: they are generally less worried by various illnesses, they recover more quickly from surgery and, amazingly, they are also likely to live longer. One impressive study carried out by Toshihiko Maruta and colleagues (2002) at the Mayo Clinic in Minnesota selected 839 patients who had referred themselves for medical care nearly forty years previously. These patients had submitted themselves for a battery of tests, including one which measured their optimistic thinking. Of these patients, 200 had died by the year 2000, but those who were optimists had 19 per cent greater longevity than the pessimists.

There are probably many reasons why people end up with very different expectations of life. The most obvious reason is that past experience has taught some people to expect a lot or to expect very little of life. However, even if the pessimist has learnt from bitter experience that life can have some nasty surprises waiting for them, a few bad experiences of life can lead them into habitual pessimistic thinking. This habit of thinking negatively can cloud their memories of the good things that have happened and even lead them to make the worst of future opportunities for happiness.

In the 1960s, cognitive psychologists began to develop a number of therapies for people suffering from depression and anxiety. This approach focused on identifying negative thinking and devising strategies to actively promote more positive thinking. This **cognitive therapy** is often used on its own or in combination with drug therapies, and it has proved to be effective in many cases. It is likely that some of you reading this book will have experience of **depression** or anxiety. Depression is often described as the common cold of mental illness. Please note that there is no suggestion that people who are depressed just need to think more positively. Depression can be a very serious illness which should be treated by a qualified practitioner. But even if you have been lucky enough to avoid depression, you will know what it feels like to be a bit down.

Many of you may be able to relate to a situation where you feel low in spirits and this makes you focus on more negative aspects of your life, which makes you feel even worse. A conscious effort to stop this downward spiral could be difficult and hard work, but if you are

### **Cognitive therapy**

a form of therapy where the goal is to replace negative or distorted thoughts with more positive and rational thoughts

### **Depression**

an affective disorder or disorder of mood characterised by extreme feelings of sadness, feelings of low self-esteem, social withdrawal and physical symptoms such as eating and sleep disturbances



prepared to make the effort, it could result in a reversal of the downward spiral and a more positive and pleasant outcome for you.

Martin Seligman (2005) is generally known as the psychologist who initiated positive psychology. He asked 577 people to write about a time when they were at their best and then to reflect on the personal strengths displayed in the story. They were told to review their story once every day for a week and to reflect on the strengths they had identified. Participants were also asked to write down three things that went well each day and to find a reason why they went well. Seligman found that the happiness levels of the group increased significantly and stayed this way even after six months. Making a deliberate attempt at least once a day to reflect on some of the good things in your life appears to have a major impact on your happiness.

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### Activity 16 'You at your best' and 'Three good things'

Allow about 10 minutes each day over the coming week

You might like to try for yourself the exercises that Seligman used:

#### You at your best

Try to reflect on your life and think about when you were most happy with yourself, when you were at your best – this could have been a time when you achieved something important to you, or it might have been a time when you made other people happy. Now think about what strengths you employed during this time – this could be things like keeping a sense of humour, being persistent, keeping positive or being creative. Write a short account of this happy time, paying special attention to the strengths you have identified. During the following week, read through your account once each day and focus on your strengths.

#### Three good things

Just before you go to sleep at night, reflect on how the day went. What went well? Why did it go well? Make a brief note of three good things that happened during the day, and explain why these good things happened.

#### Discussion

The goal of both of these exercises is to focus your thinking on positive aspects of yourself and positive experiences in your life. After you have engaged in these exercises for a week, reflect on your happiness – have you felt more cheerful and positive?

---



Cognitive psychologists have identified a number of negative ways of thinking that are frequently observed in unhappy people. These include:

- I need other people to like me and approve of me.
- It doesn't matter how hard you try, if luck is against you, you won't succeed.
- If I have to make a choice, it is important to be sure I make the best one.
- It is important to do all things competently.

These thoughts are described as negative as we can't always please everyone, rely on luck, make perfect choices and always be completely competent. We are setting ourselves up for repeated failures, as we will occasionally meet people who don't like us or we will make a poor decision or mess something up. Failures lead to more stress and further negative and unhappy thinking. What the cognitive therapist aims to do is to take these negative thoughts and challenge them, then help the person substitute more rational and positive thoughts.

---

### Activity 17 Substituting positive thoughts for negative thoughts

Allow about 10 minutes

Take each of the negative thoughts listed above and see if you can find a more rational and positive substitute.

### Discussion

Here are some suggested substitutes:

- As long as the important people in my life like me and approve of me nearly all of the time, it is not necessary to try to please absolutely everyone I meet.
- Luck has very little to do with success; you get out of things what you put in.
- If I have to make a choice, it is important that I make a good enough choice and then once the decision has been made, stop worrying about it.
- I can't get everything right all of the time, but as long as I can make a good enough job of most things I do, then that is enough.

---

Ironically, the increased level of choice that we have in modern society can be a source of stress and unhappiness. Some people think that they must make the best decision every time they have a choice to make.



Similarly, in their activities they are perfectionists. Barry Schwartz (2005) describes these people as 'maximisers'; they can be contrasted with a happier group of people who are called 'satisfiers'. Satisfiers are the people who are content with the 'good enough' outcome. Maximisers faced with a choice are always worried that they may have missed the best opportunity, and once they have made their choice they will frequently wonder whether a different choice would have worked out better. Satisfiers, on the other hand, may not make the best choice possible and may end up with something less good than maximisers; however, they are content to make their choice and then move on, and not keep analysing what would have happened if they had made a different choice.

Positive and negative thinking are also related to the belief about whether people control their own reactions or whether their reactions are controlled by other people and external circumstances. Julian Rotter (1966) described this as our **locus of control**. If your locus of control is internal, you believe that you can control what happens in your life, whereas if your locus of control is external, you believe that external forces will control what happens in your life. People with an internal locus of control are more likely to make an effort to take action when they are unhappy because they believe that by doing so they may bring about a better situation. People with an external locus of control tend to remain inactive when they are unhappy because they think that whatever they do will have no effect.

Some research carried out by Ellen Langer and Judy Rodin in 1976 illustrated how a feeling of control over some quite small aspects of living can have a large impact on the happiness, alertness and even physical health of elderly residents in a nursing home. Residents in one group were able to choose how to arrange their rooms and to choose their food and mealtimes, and they were also given a plant to care for. They were compared with a second group of residents where the nursing home staff made all of these decisions for them as well as taking care of the plant. The residents in the first group became more alert and active, and rated themselves as having a better sense of wellbeing compared with the second group. In addition, the residents with more control even had a lower **mortality rate** compared with those who had control taken from them.

You read in the previous chapter about using meditation to increase happiness. This was discussed in the chapter about the brain because of the research linking meditation with changes in areas of brain activity. It

#### **Locus of control**

A person with an internal locus of control believes that they are responsible for their own actions and their destiny is under their own control. A person with an external locus of control believes that their destiny is controlled by external events

#### **Mortality rate**

the number of deaths in a group of people, usually expressed as deaths per thousand



could equally well be classified as a cognitive strategy as it involves our way of thinking. This is a good illustration of the fact that it is impossible to draw firm lines between different influences on a person's thoughts, feelings and behaviours, as changes in one area will lead to changes in another.

So, in summary, people can direct their thoughts to make themselves happier if they remind themselves of their strengths and the things that have gone well. It is important to have realistic expectations that things have to be only good enough, not perfect, and a belief that we can make ourselves happier if we make an effort to take action. In the next chapter you will read about another aspect of life that can have a positive influence on the way that we think about ourselves, namely having good relationships with people who are important to us.

### 3.6 Learning skills – writing essays

Being able to write essays is an important skill to develop, since essays are one of the main ways in which students in psychology are asked to demonstrate what they have learnt. If you haven't written an essay for a long time or have never written an essay, it is important to remember that no one is born knowing how to write essays. It is a skill, just like any other skill that needs practice to develop, so please don't feel discouraged if you don't get it right the first time. Learner drivers do not expect to get into a car and drive as well as their driving instructor the first time they go out on the road. However, a few basic guidelines before you start driving or writing essays may help.

Let's break down the task into four simple steps:

- 1 Read and analyse the essay title.
- 2 Plan your answer.
- 3 Draft your answer.
- 4 Write up the final version.

#### Read and analyse the essay title

The key to producing a good essay is to always check whether or not you've answered the question set. Therefore it is important to read and analyse essay titles carefully. See if the title can be broken down into a number of parts or questions. Underlining the key words and instructions is a good place to start. This will help you to identify what

you are being asked to write about and also how you are being asked to write about it.

## Plan your answer

Students can fall into the trap of starting to write an essay without planning what they want to say first. You'll find that taking time to organise your ideas and plan your essay first will pay dividends.

An essay plan is simply a set of notes outlining what you intend to write about in each paragraph of your essay. Your plan might simply be some rough notes with numbered points, or even a mind map. However you construct this plan, it is important to show how your essay will be structured. All essays have essentially the same structure – a beginning, middle and end, or an introduction, main body and conclusion.

**The introduction** is one short paragraph which sets the scene and acts as a signpost to the reader indicating where you're going with your answer. Its purpose is to orientate the reader, perhaps by providing definitions of key terms and concepts or placing the issue being discussed in context.

**The main body** is the bulk of the essay where you develop your argument through the points that you make. For a 1000-word essay, it will probably be four or five paragraphs. Generally, you will cover one point in each paragraph. Each point should be supported by evidence. You will examine evidence and how to use it to develop an argument in more detail at the end of the following chapters.

You should assume that your reader is intelligent but has not read this book, so you need to explain each point clearly. Also show how your line of argument directly addresses the essay title. For example, it can help to return explicitly to the essay question at the end of each paragraph.

**The conclusion** should be one paragraph where you summarise your essay by gathering the most important points that you have made. You should not introduce new ideas or evidence in your conclusion.

Writing your essay plan is probably the hardest part of producing an essay but it will help you to think clearly about how your argument will develop and what evidence you will be using. It should be at your side to guide you as you write the essay out in full.



### Draft your answer

Write out your essay in full, working closely with your plan. You might have to take a few goes at this. It is important to write clearly and in your own words. Don't be tempted to use long, complicated sentences. Short, simple sentences will usually convey your points best.

Once you have produced your draft, read through your essay carefully. It is worth reading your essay aloud as we can often hear when something is wrong more easily than we can see when something is wrong. Check that all the material that you have covered is relevant to the essay question and that the essay has a clear structure and a logical flow. Don't forget to check that you are within the word limit.

### Write up the final version

This really is the easy bit as you have done all the hard work in your plan and draft.

## 3.7 Conclusion

In this chapter you have been introduced to the area of cognitive psychology which is concerned with intellectual processes such as perception, memory and thinking. You have explored the ways that we think and the ways that we organise our thinking by using mental images, concepts and schemas. You have also considered how we can use an understanding of organisation to improve our recall of information. Conversely, you have seen that our attempts to organise information can sometimes distort our thinking and recall.

The chapter has also focused on the ways that we think about other people and how we make assumptions that are often based on very little hard evidence. Our thinking can influence the way that we behave towards others and in turn influence the way they respond to us.

In the next chapter we will continue to examine the influence of relationships with other people.

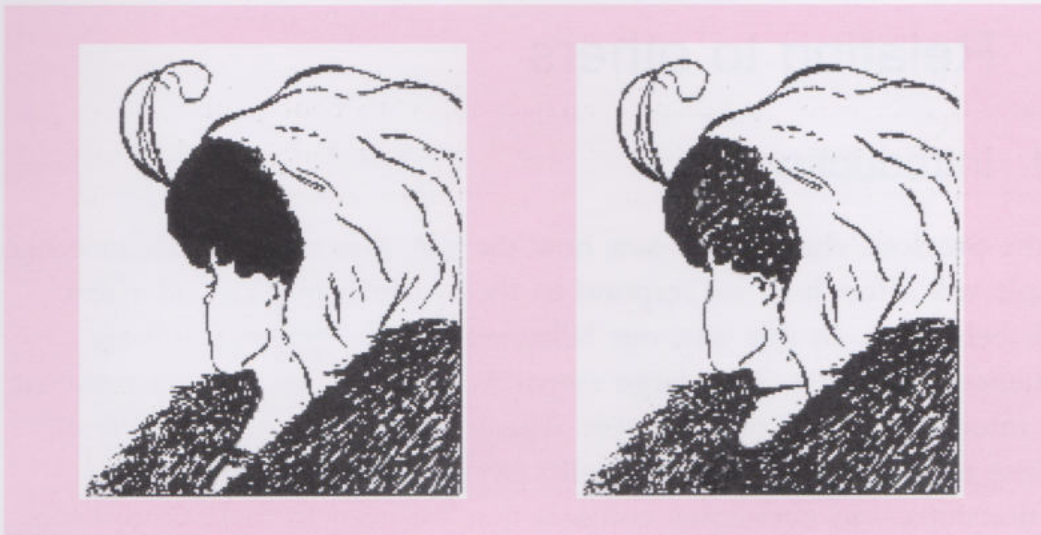


Figure 25 Different versions of Leper's ambiguous lady picture



## 4 Relating to others

### 4.1 Introduction

In the previous chapter you saw how the way that we think about other people will affect how we respond to them, which in turn will affect their behaviour. In this way, our behaviours both influence and are influenced by others. To a large extent we are who we are as a result of our interactions with other people. These interactions can range from intense involvement in other people's lives – these are our close relationships – to occasional contacts that we need to make in order to do everyday things such as buying a newspaper or having a haircut. These latter types of relationships are called **instrumental relationships**. This chapter will focus on the close personal relationships of family, partners and friends, rather than the more distant instrumental relationships.

#### Instrumental relationships

relationships that last only as long as they are immediately useful and tend to be impersonal and carry few obligations

Newborn babies form their first relationships with the people who take care of them. In the UK and most parts of the economically developed world, these primary carers are usually, but not always, the parents. Relationships then form with brothers and sisters, and beyond to the extended family (including step-parents, aunts, uncles, grandparents, cousins). As children move out into the world they form relationships with other children. With adulthood, new types of relationships are established, as we develop more friendships and more intimate links with other adults.

At any time of life we will find ourselves at the centre of a network of relationships that radiate out from us. We can have a strong sense of ourselves as individuals with personal memories, individual abilities and personality characteristics that make us the centre of our own conscious awareness, but usually this includes an awareness of a set of relationships with other people.

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#### Activity 18 Your social network

Allow about 5 minutes

Take a blank sheet of paper and draw a small circle in the centre and write your name in it. Around this circle note down the name or initials of each person that you would say you have a relationship with. Put the names of those you're closest to near your circle, and those you are more distant from farther away. Then take the opportunity to reflect on

the people you've included and how closely or distantly you've placed them in relation to yourself. Are you surprised by any patterns that emerge?

## Discussion

In this activity, some people would not have enough space on their sheet for the names of people they have a relationship with, whereas others may have noted only a few names. Whether you have many or few connections is not important; there is no ideal number of relationships. The main value of an exercise like this is to get you to begin to reflect on your relationships and what they mean to you.

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Close involvement with other people can be emotionally sustaining, intellectually stimulating, and involve quite challenging commitments. A key aspect of a relationship is the expectation that each individual has of the other and what they each want from the relationship. Think about one of your own close relationships. Can you identify what you expect from the other person and what they might expect from you in return? While our expectations of others are rarely explicitly stated, they do need to be met to a significant extent if a relationship is to provide satisfaction for those involved. Managing relationships forms a constant, dynamic backcloth to everyday life.

Relationships are a key feature of our lives, sources of both pleasure and pain, but without them we would wander lonely through life, socially isolated and emotionally impoverished.

It is almost impossible to think of lives lived without relationships – in fact, 'solitary confinement' has been used as a form of increased punishment in prison, or in workplace disagreements when a worker who refuses to engage in industrial action might be shunned by their workmates ('sent to Coventry').

The study of relationships is of particular interest for both developmental and social psychologists. **Developmental psychologists** study the range of emotional, intellectual and social changes that take place as children and adults grow and mature. **Social psychologists** focus on social interactions and the way in which individuals influence one another. In this chapter you begin to explore some of the research and theories developed by these psychologists, which show how relationships influence us.

### Developmental psychology

the field of psychology that focuses on development across the lifespan

### Social psychology

the study of the individual in the social world



Section 4.2 focuses on the earliest relationships formed between a baby and its main caregiver(s). Section 4.3 moves on to consider relationships formed in childhood and adolescence, and the relatively new internet-based phenomenon of 'virtual relationships'. Section 4.4 considers the types of relationships that are established in adulthood, and Section 4.5 examines the link between close personal relationships and happiness. At the end of the chapter in Section 4.6 there is a focus on developing the learning skill of recognising evidence.

### The aims of this chapter are to:

- explore the influence of a baby's first relationships on later development
- identify some of the effects of childhood friendships
- examine the formation and maintenance of intimate adult relationships
- consider how our relationships can influence how happy we feel
- introduce the skill of recognising evidence.

## 4.2 The first relationships

A baby's first experience of relationship formation is with its main carer or carers. In most, but not all, cases this would be the mother and/or father or other close family members. Psychologists have long been interested in these first relationships, as the quality of the attachment formed at this stage appears to have a significant impact on later development. This section will look at how early attachments are formed and how they influence later development.

### Forming an attachment

Until the 1970s the general view taken by psychologists was that babies were passive and mostly only able to signal needs by crying or smiling. Research carried out over the past few decades has caused this view to be changed. It is now the view of most psychologists that even before birth a baby is actively engaging with the world. While the baby might not actually be in the world in a physical sense, they are in touch with it through their senses. An early 'attachment' to the mother is established as the unborn baby endeavours to make sense of its environment, the

regular features of which are the sound of its mother's voice and its mother's 'odour' (odour being the sensory 'taste/smell' of the mother). Audio recordings of activity within the womb show that the developing baby can clearly distinguish speech sounds from background noise. It has been suggested that this early experience of speech could form the initial foundations for the acquisition of language.

As the baby develops in the mother's womb (Figure 26), behaviour settles into a pattern of alternating restful and active phases. These movements can be felt by the mother (and externally by other family members) – the unborn baby is becoming an active, if tiny, person to those with whom it will form its early relationships, and a process of mutual bonding behaviour is beginning.



Figure 26 Baby in the womb

A relationship established before birth provides a basis on which to significantly develop the relationship between baby and mother during the early period following birth.

Within minutes of birth, a baby shows a preference for human voices, especially for that of the mother, turning its head towards voices but not towards random sounds. Babies also demonstrate a preference for human face shapes, which of course they would not have encountered before birth. Evidence such as this suggests that human babies are born with a genetic predisposition to interact with other humans from the time of birth onwards.

By the time they are two weeks old, babies show a distinct preference for their mother's (or primary caregiver's) face and voice. They smile, make hand movements and have patterns of eye movements that



involve seeking mutual eye contact. If you have experience of caring for a baby, you may have noticed this. Thomas Brazelton (1991) has identified sequences of interaction where the mother and baby are each reacting to the other's actions and both are initiating reactions from each other. Lynne Murray and Liz Andrews (2000) highlighted the role of imitation in early mother–infant interactions and suggested that when a baby's physical needs have been satisfied, it is eager to communicate (Figure 27).

At about three months, babies' visual ability develops and they begin to react to objects such as toys placed a few metres away. Also around this time interaction develops to include games, mainly of an anticipatory nature, for example 'round and round the garden' or 'walking fingers' with the promise of impending tickling. This associates the excitable pleasure of tickling with the mother and other close relatives, linking certain individuals and pleasurable sensations.



Figure 27 Mother and baby communicating

It is clear that both the baby and the adult are active in forming an attachment. Rudolph Schaffer and Peggy Emerson (1964) studied sixty Glasgow babies over a one-year period. They visited the infants in their homes and carried out an observational study as well as conducting interviews with parents and other carers. As in most observational studies, they were looking out for particular types of behaviour, in this case behaviour that would indicate that the baby was attached to an adult. They found that one of the best indicators of attachment was when a baby showed 'separation upset' when the adult they were attached to moved out of sight. They found that the first attachment appears at about seven months old and that babies do not necessarily

become attached to the person who spends most time with them or cares for their physical needs. What is important is the quality of the interactions. The baby becomes attached to the adult or adults who are sensitive to the baby's signals and are prepared to talk and play.

Helen is a 30-year-old mother of two children who was interviewed about her relationship with her three-month-old baby daughter. Helen noted that she had a growing sense of a relationship as her pregnancy progressed, starting from when she first felt the baby move. Helen became more conscious of her lifestyle. She was already a non-smoker, but she gave up alcohol, was very careful about medication, and took more care with what she ate. She also occasionally 'spoke' to the baby. But for Helen, this pre-birth sense of a relationship was weak compared with the much stronger feelings experienced after birth. Now that the baby is three months old, she feels that both she and baby Sophia regularly engage in conversations, with each responding to the facial gestures, body language (the baby moves her arms a lot if excited) and verbal expressions of the other. In addition, there is lots of simple eye contact during interactions, which Helen feels is a key aspect of the bonding process.



Figure 28 Mother, father and baby playing together

The introduction of a baby into a family requires a period of slow acclimatisation, of getting used to each other. Given the complexity of people's lives, and of differences in the behaviour of babies, it is tempting to seek relatively simple explanations if there are difficulties in establishing these early relationships.



In the past there has been a close focus on the mother's role, but it is now accepted that we need to consider the wider social context (including parental expectations and the wider family context) within which a relationship develops. This approach enables us to consider a range of other factors, including the background of the parents and what they bring, emotionally and intellectually, to the interaction. This can help us to understand the different approaches taken by different parents and the effects that these might have on an infant's behaviour.

There is no one ideal way of bringing up children, but the type and quality of these early relationships do influence the social, emotional and cognitive development of the child.

### Why attachments are important

Research has shown that attachments can be secure or insecure. A baby who is securely attached to an adult will be confident that the adult will respond to its needs. Mary Ainsworth (1978) looked at individual differences between infants in relation to the security of attachment by using a technique that became known as the 'strange situation'.

#### Strange situation

Ainsworth observed one-year-old babies in her study. The child was placed in a room with a selection of toys, and observers recorded their reactions when their parent or usual carer left the room and returned, and also when a stranger entered the room.

A securely attached child was seen to be very happy exploring the room and the toys when the parent was present. When the parent left the room, the child became distressed, and when the parent returned, the child moved quickly towards them and was easily comforted. If a stranger entered the room while the child was alone, the child could not be comforted by the stranger and actively resisted the stranger. Insecurely attached children were less confident in their exploration of the room and were either indifferent to the presence or absence of the parent or seemed unsure about the parent – going to them for comfort and then struggling to get away.

You read earlier that these first relationships can influence all aspects of a child's development. In terms of their emotional development, a securely attached child will know that they are loved and valued, and this will foster a sense of high self-esteem. A secure attachment also



promotes cognitive (intellectual) development as the child will be more confident about exploring the world around them. Social development is also encouraged as the child is likely to feel comfortable in himself and will be able to use opportunities to learn how to interact with other people.

While children with secure attachments are less likely to have difficulties as they go through childhood and adulthood, a child who does not form a secure early attachment is not necessarily doomed to a life of difficulties. Later positive experiences with caring adults can reverse any early negative experiences, and conversely a securely attached baby can become an insecure child if the attachment that it has formed is damaged or broken.

Sadly, there are a number of case studies of children who were not only deprived of the opportunity to form an attachment at an early age but also suffered a range of other negative experiences. Jarmila Koluchova (1972) reported a case of twin boys in Czechoslovakia who had suffered extreme deprivation for a number of years.

### The Koluchova twins

The twins were discovered in 1967 aged seven years old. They had been kept in a small unheated room without furniture or toys. They were poorly fed and had been subject to regular harsh beatings. They had been living in these conditions for five and a half years, ever since their stepmother had been responsible for their care. On examination they were found to be physically and mentally damaged. They could not stand up straight, walk or talk, and were very frightened of people. After a spell in hospital and then a special school for children with learning difficulties, the twins were fostered by a particularly loving and patient woman. By the age of eleven, their speech was normal and they were both physically active and emotionally stable.

A follow-up report written when the twins were twenty revealed that they still had a good relationship with their foster mother and family, their intelligence was above average, they were both working and each had recently embarked on an intimate relationship with a young woman.

Research has shown that children may be very resilient and that the effects of terrible early experiences can be reversed by love, appropriate



care and positive relationships later in life. It is to these other relationships that you now turn.

### 4.3 Childhood relationships

As a child develops through infancy into childhood, relationships are formed beyond the immediate family of parents and siblings to the wider family of grandparents, uncles, aunts and cousins. Understanding how any family operates is considered to be a key approach to understanding the behaviour of children. Most studies still tend to focus on the **nuclear family** that is typical of western cultures rather than the **extended family** seen in other parts of the world (Figure 29).

The traditional approach to studying families tended to take individual relationships – mother–child, father–child, father–mother, sister–brother – as relationships that could be studied separately. However, researchers now take the view that family relationships are not simply the sum of the individual relationships, and in order to understand what is happening in any one relationship, you need to understand the relationship dynamics of the whole family.

#### **Nuclear family**

a household consisting of parent(s) and their children

#### **Extended family**

a household consisting of parent(s) and their children plus other family members such as grandparents, uncles, aunts or cousins



Figure 29 Children with extended family



For example, a father and son might argue, and the son sulks and temporarily withdraws from family life. His sister might then see this as an opportunity to curry favour with her father by highlighting her brother's 'faults', or if more sympathetic to her brother she could plead her brother's case – let the father know about a problem her brother is experiencing at school, such as bullying or with a girlfriend. Part of the background context to this family's life might be that all family members know that any outburst of anger between them always upsets the mother; they try to contain their frustrations and anger, but this strategy breaks down occasionally and then massive rows take place.

We can see that in order to understand the more obvious source of conflict in the father–son relationship, we need to understand the dynamic pattern (and background to it) within the whole family.

The family setting is a primary source of children's **socialisation**, but as the child moves beyond the family and into school, relationships are established that serve as a secondary source of socialisation. For a child, play with other children offers opportunities for developing friendships and for mentally preparing for (rehearsing) future adult roles and relationships. This section focuses on these different friendships from childhood through to teenage years and beyond. As you read, pay particular attention to what is being said about how these relationships influence the growing child.

### **Socialisation**

the process by which individuals come to learn the beliefs, values, rules, skills and patterns of behaviour that are appropriate for their society or culture

## **Let's play**

Play occupies most of a young child's time and some of the time of adolescents and adults too. Play is a very serious business for children as through play they develop physical, social and intellectual skills. It is also an enjoyable activity and can be a way to relieve stress.

Babies and toddlers mainly engage in solitary play, so even if there are other babies nearby, they play alone rather than together, and usually show very little interest in each other. From the age of about two years, children will play alongside each other and be much more aware of each other's presence, occasionally watching what another child is doing, but there is minimal interaction. However, some time after the age of about three years, children start to play with other children in cooperative play which involves a great deal of interaction and negotiation with each other.

Recent research into children's peer relationships has shown the value of these interactions in developing a child's sense of their own individuality



and also in allowing them to understand the needs of other children. The focus of younger children tends to be very egocentric so that they have difficulty in seeing the world from someone else's viewpoint. However, increasing exposure to other children, along with the development of their own cognitive abilities, fosters the ability to take another child's perspective into account and so to understand the motives, intentions and emotions of others. This ability makes a vital contribution to the development of social skills. Being aware of other people's perspectives (of what they could be thinking in relation to a situation) has become known in psychology as the development in a child of a **theory of mind**.

### Theory of mind

the ability to realise that other people also have knowledge, beliefs, intentions and feelings, and these may differ from one's own

Being able to show an understanding that other people may be thinking something different from oneself usually develops around the age of three or four. Up to this age a child shows little understanding that other people could be thinking differently. A classic experiment uses a situation where an experimenter introduces a child to two dolls called Sally and Anne (Wimmer and Perner, 1983).

### Sally and Anne

Sally has a basket and a marble, and Anne has a box. Sally places the marble in her basket and then leaves the scene. While Sally is absent, Anne removes the marble from the basket and puts it in the box. Sally then comes back and wants her marble.

The question put to the child witnesses was: 'Where will Sally look for her marble?' It was found that children up to the age of about three usually answer from their own perspective. Because they have seen the marble being removed from the basket and put in the box, they answer that Sally will look in the box. However, an older child witness would usually be aware that Sally had not seen the marble being moved to the box and realise that she would therefore look for it in the basket. (See Figure 30.)

The older child understands that there can be different perspectives and that Sally's would be different from their own.

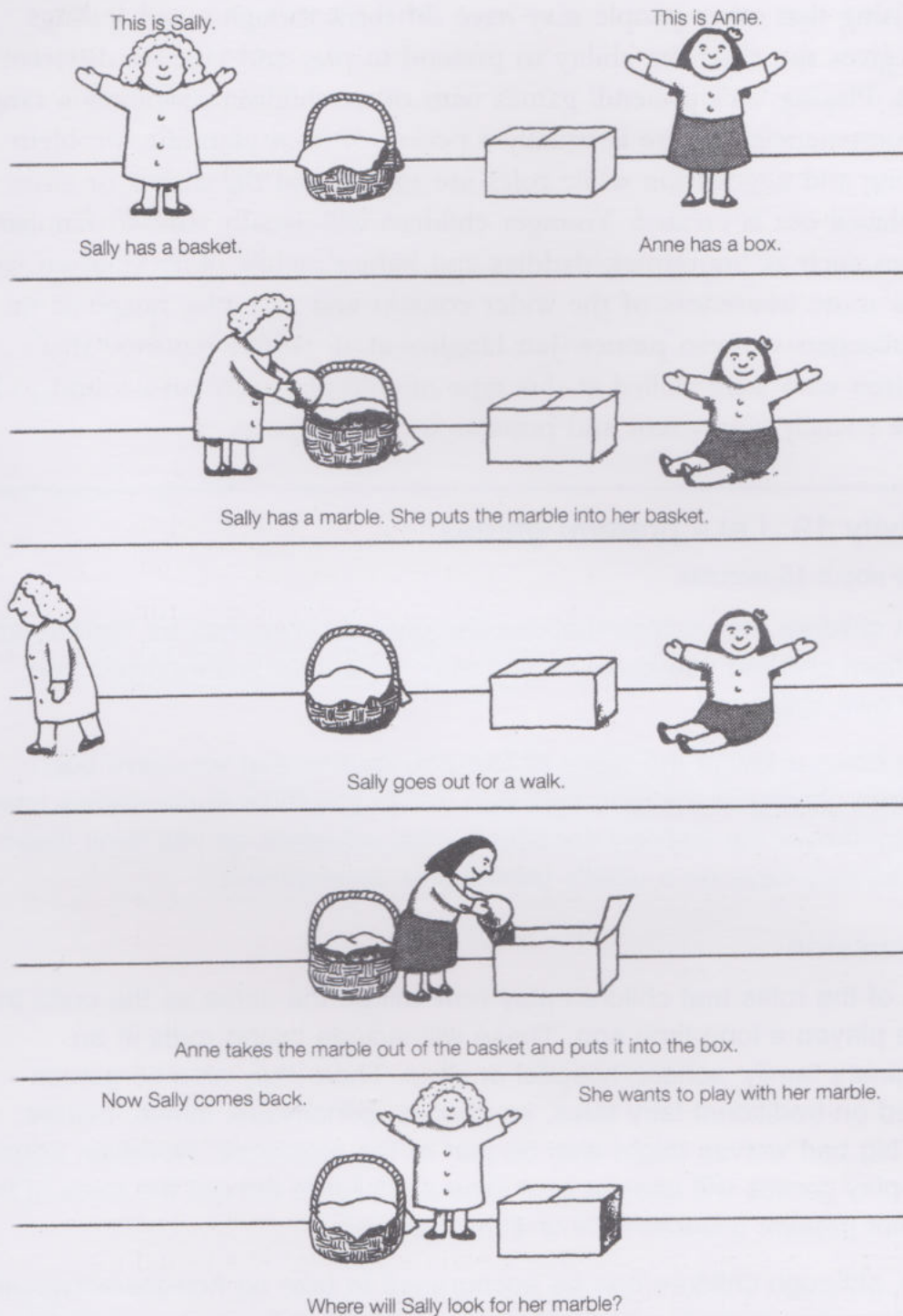


Figure 30 Cartoon strip of experiment

Before they develop an understanding of different perspectives, children can be difficult to manage as they often stubbornly insist on their view of the world as being the only possible view. As they develop a theory of mind (or rather of other minds), they tend to be more cooperative and more amenable to different views of any situation.



Realising that other people may have different thoughts and feelings also gives the child the ability to pretend in play and take on different roles. Playing 'let's pretend' games with other children promotes a range of competencies. There is usually a period of joint planning, problem solving and negotiation while roles are agreed and the drama or story to be played out is created. Younger children will usually stick to familiar scenes such as 'mummies, daddies and babies', while older children will show more awareness of the wider context and may play hospitals or shopkeepers or even pirates. Jan Hughes et al. (1989) reported that children who were skilled at this type of role play were also found to be more socially competent and popular with their peers.

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### Activity 19 Let's pretend games

Allow about 15 minutes

Most children play games that involve role play. You may be familiar with this from children you know, or you may remember some games from your own childhood.

Note down a few of the types of role-play games that you have seen children playing or that you took part in. Do you think these games have changed over the last few decades? What influence do you think these games may have on a child's growth and development?

### Discussion

Lots of the roles that children play now will be the same as the ones that were played a long time ago. These will include taking roles in an imaginary family, school, hospital or shop. There may also be games based on traditional fairy tales, so princes, princesses, fairies, pirates and big bad wolves might also be part of the repertoire. However, some role-play games will change over time as children act out the roles of the current popular children's TV or film characters.

Also, although children can be encouraged to take on non-stereotypical gender roles, there is a remarkable persistence in boys playing traditional male roles (such as train drivers) and girls playing traditional female roles (such as mothers). This is seen even in families where parents have non-traditional roles so that the mother who is a doctor or the father who is a nurse may still find their children insisting that boys are doctors and girls are nurses.

Playing games helps with children's physical, social and intellectual development. Role playing can specifically help children learn how to behave in the world. By modelling adult roles, in a sense, they become socialised and they learn how to act. Sometimes role-play games can



teach a child ways to practise coping with emotions (for instance, when they 'act' frightened or angry, or play out ways of resolving conflicts).

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Relationships based on friendship are seen by children as being distinctly different from family relationships. Children interact in play-based situations in which they share toys, engage in joint games or sports, quarrel and tell stories to each other. But friends can also share their experiences, and in the sharing they gauge their friends' reactions and compare their own experiences with their friends' experiences. Many interactions at this stage are based on reciprocal (mutually rewarding) 'give and take' types of cooperation. For example, if a child lends their friend a bicycle, then the friend might share their sweets.

Through this play with friends, children are able to connect to the adult world within a psychologically manageable framework. Children are able to control their play, in contrast to the adult world which contains uncertainties and complications that are impossible for the child to control. William Corsaro has suggested that children endeavour to construct their own culture: 'It is possible that children want to create distance and privacy and perhaps even want to undermine adult culture' (Corsaro, 1985, p. 20). At this stage children tend to be more open to each other, with a great deal of mixing in cooperative activities and play. Small groups form and re-form with a wide range of different children, and relationships change as interests and opportunities change.

### Older children and adolescent friendships

The childhood relationships formed on the basis of sharing and trust continue and develop further as children move into adolescence. One area of change that has been identified involves the changes that can often be seen in the relationship to parents. For younger children a parent's authority is usually accepted, whereas for older children there tends to be more openness on the part of parents to share authority and to see their daughters and sons as individuals who are able to make significant choices. The expectation that authority should become more dispersed at this stage can sometimes be a source of conflict in the parent-adolescent relationship (something that you may appreciate from your own personal experience). Acceptable boundaries of behaviour can be a source of conflict as the child's expectations outrun their parents' willingness to concede to their demands as a developing young person.



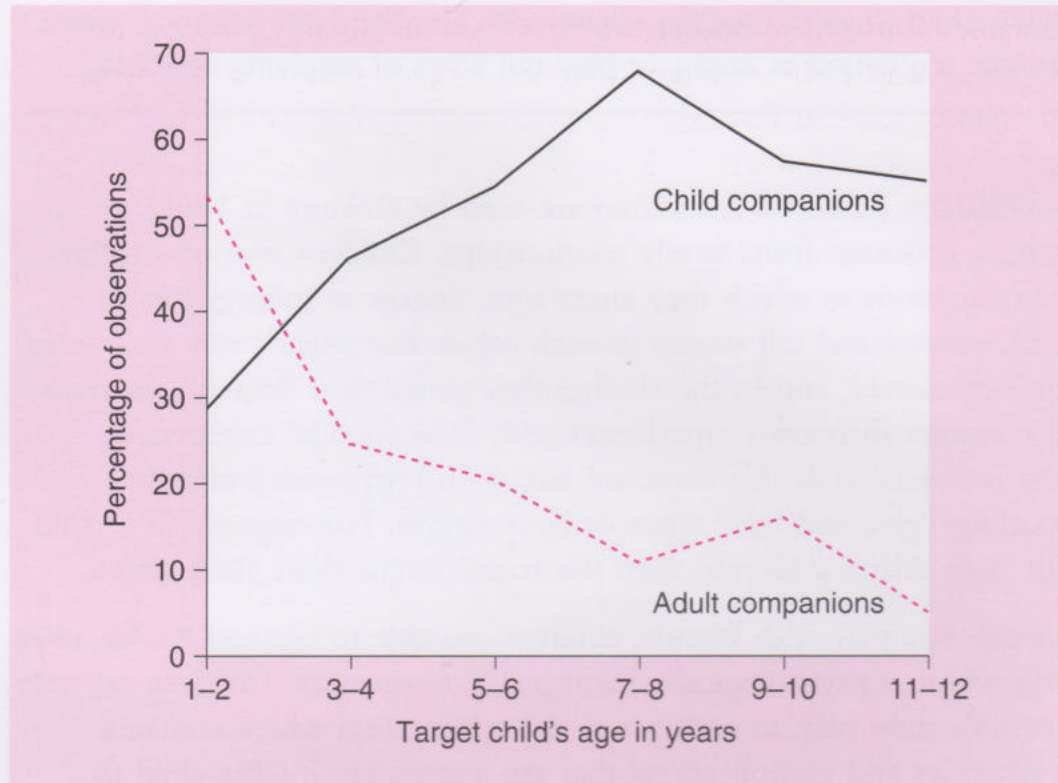


Figure 31 Child and adult companions at different ages

As can be seen from the graph in Figure 31, as children get older, the time they spend with other children increases and the time they spend with adults decreases. From adolescence, relationships with peers become increasingly less casual than those formed before adolescence. Younger children tend to form friendships on the basis of proximity and gender, but teenagers tend to seek out others who have similar interests and interpret the world in similar ways.

In adolescence we often see a narrowing of the range of friendships, and these relationships usually become stronger and more exclusive, with best friends and fairly narrow interests (based on such things as type of music, dress, religion and shared values). The emerging individualism and a strong peer-group identity can give rise to an adolescent withdrawing from the family, preferring solitude in their bedroom or seeking the company of friends. Schaffer (1996, p. 319) states that: 'Peer interactions in the course of childhood tend to become more *frequent*, more *sustained*, more *complex*, more *intimate*, more *cohesive*'.

The close relationships of adolescence are characterised by the sharing of special secrets and intimate information involving such areas of interest as life plans, other friendships, social activities and romantic encounters (actual, possible and imagined). Relationships in which the sharing of intimate information is an important factor have been found

to enhance self-esteem and also to improve the ability to cope with conflicts arising within the family or at school. These close friendship relationships tend to feature more as an aspect of female rather than male adolescence, but they can be important to both genders, and indeed these types of friendships have been found to feature in a diverse range of cultural settings, including Inuits of Canada, tribal groups in Nigeria, and teenagers in the former Soviet Union.

Not all young people growing into adolescence are able to establish themselves in mutually supportive peer relationships, and this can be a very difficult time as feelings of rejection and a sense of social isolation (of being an outsider) impact during a critical developmental period – the period involving the transition from childhood to adulthood. Young people who, for whatever reason, are unable to form relationships with their peers can carry this sense of rejection into late teen and adult life.

Close adolescent relationships offer mutual support and a context within which personal identity can be developed. Anyone who has observed a group of teenage friends will see that they can also generate a great deal of happiness. Adolescent peer groups provide socially acceptable settings for carefree interactions with equals – a world mostly inaccessible to adults and brimming with the potential for shared happiness for those included (Figure 32).



Figure 32 Early teenage children 'hanging out' together



### Chat room

a place on the internet where people can meet and communicate by typing messages on their computers

## Virtual relationships

Many young people are now focusing their interest on new types of communication technology, such as texting or using the internet. The spread of communication based on the internet is a growing source of new opportunities for relationship formation. The many **chat room** internet sites, where people are able to interact without seeing or meeting each other, can generate a range of opportunities to form 'virtual relationships'. Participants in a chat room site can be whoever they wish to be; they can change age, gender, background, work roles, skills and interests to suit the image they wish to project.

There is a growing body of research into internet relationships. One important finding is that most people are prepared to reveal much more about themselves during internet conversations than they would do in face-to-face meetings. As this willingness to self-disclose is usually reciprocated, with each partner disclosing more and more in response to the other's willingness to do the same, this can lead within a short time to fairly close virtual relationships being formed.

This type of relationship can be mutually satisfying and, given the control that each participant has on the level and amount of engagement they have, it can be a safe way of sustaining social relationships. But if you bear in mind that one of the participants could be disclosing a fictional character, that they are playing a role in order to become attractive to the other participant, then you can probably see the potential for problems.

An experiment by Adam Joinson (2001) involved forty individuals who had never met before. They were sorted randomly into pairs (with individuals in each set of pairs kept apart from each other), and the pairs, again randomly, were separated into two groups (they were still all kept apart). The pairs were given the task of discussing the dilemma: 'Which five people should be saved in the event of a nuclear war?' Individuals from ten pairs were each put into single cubicles in each of which was a computer on which a 'chat' program was running. The individuals from the other ten pairs were seated opposite each other. The pairs linked via computers could not see or hear each other, while the face-to-face pairs could see and talk directly to each other. So there were two experimental conditions: pairs that were communicating via a computer, and pairs that were communicating face-to-face. The conversations were recorded, and the transcribed records of each conversation were rated by people who had not seen any of the actual



interactions. The conversations were analysed in relation to the extent of the participants' willingness to offer information about themselves.

One significant, and largely unexpected, outcome of this experiment was that those participants linked by computer were judged to have disclosed four times as much personal information compared with those seated opposite each other.

This section has focused on relationships which evolve in childhood. Of course, people carry on having friends, real and virtual, into adulthood, which is the topic you turn to next.

## 4.4 Adult and intimate relationships

As young people in the UK grow into adulthood, the potential for establishing more intimate relationships opens up considerably when they leave home for university, enter vocational training, or move directly into the workforce. Each of these changes provides new opportunities for contact with a range of different people. These new settings often include opportunities to form close intimate relationships.

The bulk of research on relationships has concentrated on those in western societies, with the underlying idea of romantic love and free choice of partners. It should be remembered that this is a far from universal approach to long-term relationships. Would you be surprised to hear that the majority of marriages that take place in the world are more or less arranged or based on considerations beyond notions of romantic love? David Buss (1994) studied the citizens of different countries and found that they tended to highlight different reasons for getting married. To give some examples, he found that in Iran, factors such as education, ambition and chastity were seen as more important for choosing a spouse, while in Nigeria, citizens ranked good health, refinement/neatness and desire for home/children highest. Also, most of the research carried out in this area has focused on heterosexual relationships. However, it has been found that there are far more similarities between homosexual and heterosexual relationships than there are differences.

This section focuses on people's experiences of intimate relationships in terms of both what attracts us initially and what keeps us together in the longer term.



## Attraction

What is it that attracts us to other people for these more romantic relationships? Psychologists have identified a number of factors to explain why we might be attracted to one person but not to another. Three of the most important influences are:

- proximity and familiarity
- similarity
- physical appearance.

**Proximity and familiarity** Proximity means geographical closeness. An obvious and basic requirement for forming a relationship is that the people involved need to be geographically close enough to have opportunities to interact with each other. You may find a certain film star very attractive, but if you never get the chance to meet them or talk to them, then you'll have no chance of forming a relationship. If you examine friendship patterns of people living in blocks of flats, you'll see that they are much more likely to be friendly with the people who live near them on the same floor than with people living on different floors, just because they have more opportunities to meet and get to know each other. Similarly, people are more likely to form friendships at work with the people working near them, and students are more likely to form friendships with people studying the same subject and attending the same classes.

Having more chances to interact with another person means that we become more familiar with that person, and numerous studies have shown that we prefer people who are familiar to us rather than strangers. This is known as the 'mere exposure effect' (Zajonc, 1968), which states that the more often we are exposed to a stimulus, whether it is a sound, a picture or a person, the more positively we will rate that stimulus. The reason why we are more likely to be attracted to people we meet more often may be because we feel more secure with people that we know. However, we are also more likely to be in regular close proximity to people with whom we share interests: working together, undertaking leisure activities, being within the same friendship group and similar social circumstances. You will see below that similarity also has a part to play in attraction.

**Similarity** The old adage 'opposites attract' is not particularly borne out by research. In fact, numerous studies suggest that we tend to be attracted to people who are similar to ourselves. This applies to whether we are considering friendships or more intimate relationships.



Similarities can be seen in age, ethnicity, religion, social class, intelligence, interests and even some aspects of physical appearance. However, research suggests the most important similarities are those concerning beliefs, values, attitudes and how people see the world. Steven Duck (1992) explained that this is because seeing the world in the same way as someone else makes it easier to interact with them. It also increases our confidence in our own attitudes, which in turn bolsters our self-esteem.

**Physical appearance** Our society places particular value on certain physical characteristics. Curvy body shapes, long legs and luxurious hair are characteristics that are often seen as desirable in women. For men, desirable characteristics might include muscularity, tallness and a firm jawline. For both genders there is youthfulness, white even teeth and facial symmetry. There is a vast amount of media coverage implicitly favouring – and in the case of the advertising industry explicitly promoting – these models of attractiveness. Films, magazines and television all contribute to what might be termed the tyranny of body shape images. There is a whole industry that aims to mould consumer preferences, and therefore sell products, by distorting the reality of normal into the unreality of ideals such as the so-called ideal of women being size zero.

Because the ideal of attractiveness based on physical characteristics rather than personality traits (such as kindness, intelligence, thoughtfulness, sense of humour) is continually being promoted in western societies, you might assume that relationships in the west would be based on physical characteristics. This assumption has been found to be true, but only up to a point. Whether or not this assumption is true might be to do with the reason for the relationship: short-term fun or longer-term commitment.

Research suggests that what is valued in a partner also differs along gender lines. In a study of personal adverts, Catherine Cameron et al. (1977) found that women tended to promote themselves in terms of 'socially favoured' personality and physical characteristics, such as sense of humour, outgoing, slim, attractive, and so on. On the other hand, men tended to highlight their economic status, often using terms such as 'professional' and 'homeowner'. This difference seems to suggest that women 'think' that men look for personal attractiveness while men 'think' that women want security – the wording of the adverts reflecting what each gender 'thinks' that the other is looking for – and this is supported by a range of research.



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## Activity 20 Testing Cameron's research

Allow about 25 minutes

Find the personal ads section of a magazine or local newspaper. Go through the first twenty 'women seeking men' and make a brief note of how the women describe themselves, then do the same with the first twenty 'men seeking women'. Do your findings support those of Cameron et al.?

### Discussion

In this activity you started with a research question related to gender differences in how people promote themselves to potential partners. You then identified relevant 'gender samples' and undertook an analysis of the samples in relation to defined categories, which are items in the adverts that promote 'socially favoured' characteristics and those promoting economic status. So your research involved you taking a considered approach to 'testing' the findings of Cameron et al.

Clearly, the sample would be too small and the source too limited to provide a thorough test of gender differences in how people promote themselves in personal ads these days.

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Some psychologists suggest that in order to understand why particular physical attributes are deemed attractive, we need to consider human evolution. Darwin's theory of evolution and natural selection states that characteristics that give an animal or human the best chance of survival and of reproducing themselves will be prized. These psychologists would suggest that attraction based on physical characteristics is related to features which indicate healthiness and especially fertility.

Viren Swami and Adrian Furnham (2006) have undertaken an overview of recent research which examines this suggested influence on attraction based on physical characteristics. Their research focuses on the heterosexual male perspective.

They pose the question of whether there are physical characteristics that are found to be attractive across cultures. If so, do these characteristics demonstrate procreative potential as predicted by psychologists taking an evolutionary approach to explaining behaviour? Swami and Furnham conclude that there is research evidence to suggest that there are characteristics that have been shown to be attractive across cultures. The desirable physical characteristics for females focus on body shape, especially the waist-to-hip measurement ratio (WHR). A WHR of 0.8

means that a person's waist measurement is 80 per cent of their hip measurement.

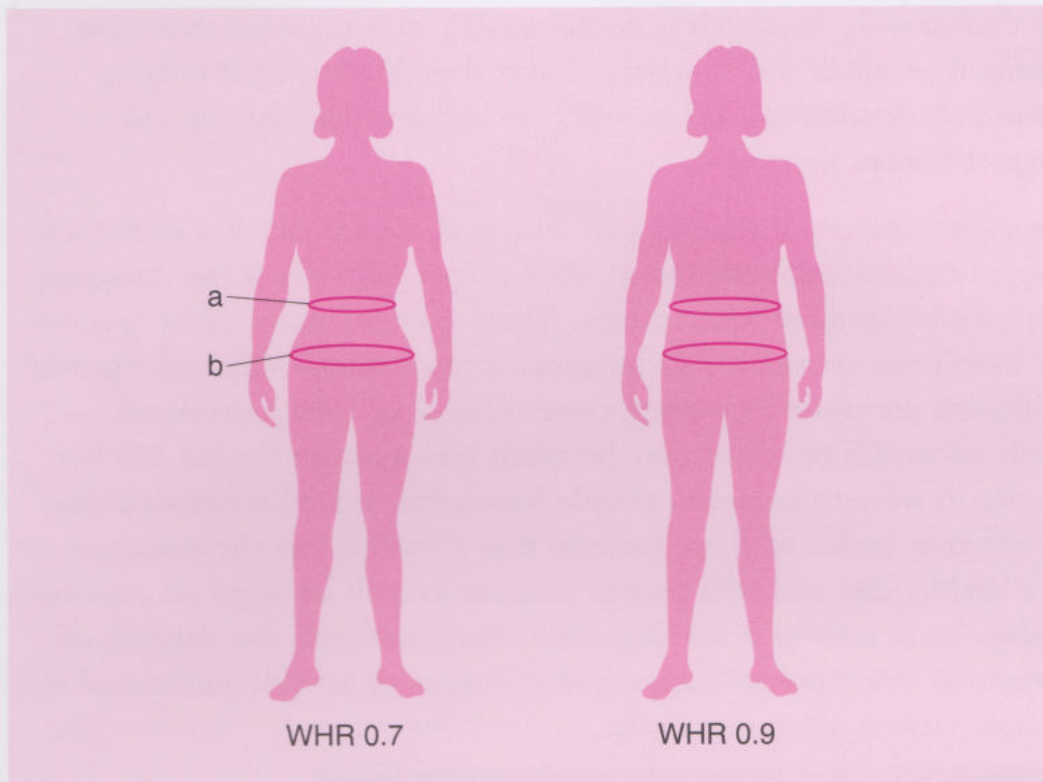


Figure 33 Waist-to-hip ratio

For a woman, a WHR of around 0.7 is better than a high WHR of 0.9 and over in terms of health and fertility (see Figure 33). In most cultures men will rate women with a 0.7 WHR as more attractive than a woman with a higher WHR. Popular evidence to support this is the fact that present-day catwalk supermodels, as well as film stars of the 1950s such as Marilyn Monroe and, going back even further, the famous (armless) statue of the Venus de Milo, all have WHRs around 0.7.

However, body weight may be even more important than WHR in determining attractiveness, and Swami and Furnham report on research that shows some variation among cultures when they looked at this measure. Generally, in economically developed societies men tend to prefer women with a lighter build, while in economically developing societies they tend to prefer a heavier build. Evolutionary psychologists explain these cultural differences by suggesting that in societies where food supplies are poor or uncertain, it is understandable that women with a high body weight would be seen as a better choice of partner. In economically developed societies these more basic considerations, which



are focused on survival in difficult environments, are not relevant and other factors may come into play.

The evolutionary approach is controversial, with most psychologists viewing it as much too simplistic, but it does offer a wide-ranging explanatory framework within which to begin to understand and interpret human behaviour.

This consideration of the work of Swami and Furnham has introduced some of the cultural variation in what people consider to be attractive for potential intimate relationships. There are a range of other features that have been considered to influence attractiveness. Whereas signs of healthiness are most important, once these have been considered, signals of wealth or status may be taken into account. In the last few decades in western societies, people have often valued suntanned skin and slimmer builds as these indicate that someone has the resources to eat a healthy diet and take part in exercise as well as to go on expensive holidays or at least to a tanning salon. However, with the dangers of suntanning being publicised, people with tans or at least sunburned skin are now viewed more negatively.



Figure 34 A bound foot

There are numerous examples, taken from different cultures, of more unusual physical adornments that have been considered to be attractive. In China the practice of female foot-binding was carried out for hundreds of years before being banned in 1911. The process started when girls were about five years old, and the ideal was to have feet no longer than four inches (see Figure 34). As you can imagine this was an extremely painful process, and girls and women were often unable to walk more than a very short distance. This was a status symbol, and the



process was carried out only on girls from wealthy families who would be expected to marry into similarly wealthy families. Girls from poorer backgrounds would be expected to work, which would be impossible with bound feet.

Similarly, in Renaissance Europe, women would often blacken their teeth to appear more attractive. The explanation for this is that sugar was available only to the very wealthy, and sugar caused teeth to rot and turn black, so by painting your teeth black you could appear to be of high economic status and therefore a desirable person.

More recently, tattoos and skin piercings have become a must-have adornment for many people in western societies. These are just some examples of the kaleidoscopic range of body adornments that have been found to be attractive for different cultures. Added to this, there is the worldwide industry of male and female make-up, clothing design and cosmetic surgery that focuses so obviously on enhancing physical features.

Our desire to establish intimate relationships will lead us to seek out certain people and present ourselves in the way that we feel will be most attractive to others. This in turn is shaped by the particular culture that we live in.

The emphasis that our society places on physical attractiveness would suggest that each of us seeks long-term romantic relationships with the most attractive people we meet. But some of the research into relationship formation suggests that we are in fact more realistic and that we tend to form relationships with partners who are more of a physical 'match' to ourselves. This is called the **matching hypothesis** and has been supported by a number of studies. In one, Bernard Murstein (1972) showed pictures of ninety-nine couples to participants. The pictures were separate so the participants did not know who was paired with whom. Participants were asked to rate each picture for physical attractiveness. The scores for physical attractiveness of the real couples were much more similar than scores for the couples that had been randomly assigned.

**Matching hypothesis**  
a theory that people are more likely to form relationships with people who are roughly equally as physically attractive as themselves

This matching hypothesis does not contradict the previous view that we are attracted to people who are physically very attractive, but just highlights how, when it comes to actually making a choice, we temper ideals with a sense of realism. This process is sometimes explained in terms of costs and rewards. The costs of searching for a dream partner would be very high if you considered the time needed and the



likelihood of rejection if someone is much more attractive than you are. Similarly, people are not usually attracted to someone who is much less attractive than they are, because while the costs would be low, so would the rewards. Some psychologists suggest that rather than being afraid of rejection, we are actually happier with someone more like ourselves, which ties in with what you were reading earlier about being attracted to people who are similar to us in all sorts of ways.

Think back to the information about schemas in Section 3.2. A schema is defined as a mental framework in which you file all your knowledge about certain objects, situations, groups of people, and even yourself. The view being suggested here on relationship formation suggests that people carry a mental schema that includes a set of characteristics that they would favour in a partner, and that they seek out people who more or less conform to this.

Research on schemas shows that factors other than appearance or physical attractiveness are seen as being more important when seeking a long-term partner. David Buss (1994), for example, studied unmarried college students in the USA and found that the three top characteristics that the participants looked for in an ideal partner were: kind and understanding; exciting personality; and intelligent.

### Staying together or falling apart

An initial attraction between two people begins a journey into the growing intimacy of a relationship. Psychologists have tended to describe and explain these intimate relationships in different ways. Robert Sternberg (1999), for instance, distinguishes between three different components of love as being 'passion', 'intimacy' and 'commitment'. Romantic love, a combination of passion and intimacy, tends not to last when commitment is low. Equally, partnerships may last through high levels of intimacy and commitment while having low levels of passion.

But how are these intimate relationships nurtured and maintained? Why do some couples stay together for decades and others split within weeks? Is it possible to identify factors that could help us to evaluate the likelihood of a relationship lasting beyond the initial attraction?

Any relationship involves a complexity of layers of interaction. Each relationship has two perspectives – two sets of needs and expectations that have to be at least sufficiently met for the relationship to continue. These perspectives are not fixed, but rather change as people's needs



and ambitions develop. The building of a relationship is carried out in different social settings, in which there is usually a range of socially recognised norms and values influencing how people should behave towards each other – and in some cultures norms and values operate through quite strict guidelines, especially in relation to how opposite sexes should interact.

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## Activity 21 Your relationships

Allow about 10 minutes

Think about your own relationship with a long-term partner or another couple you know who have stayed together (perhaps your parents or grandparents). Using Sternberg's idea of love involving passion, intimacy and/or commitment, to what extent are the different components important for your chosen relationship? Can you identify any specific strategies that you think might have contributed to keeping the relationship going?

### Discussion

You may have noted down strategies and components such as sharing interests, including hobbies or going out together, humorous interactions, positive comments about each other and similar mutually bonding activities.

Every couple is unique (like the individuals involved) so you can't generalise your experience to others and assume that what works in one relationship will work in another.

Observing interactions between couples can be a fascinating and rewarding approach taken by psychologists as they attempt to understand the internal dynamics of any relationship. For example, Kathryn Dindia and Leslie Baxter (1987) interviewed fifty married couples to try to identify strategies used to try to maintain relationships. They found that they could distinguish two types of behaviours: maintenance and repair. They identified forty-nine different strategies.

Maintenance strategies included:

- talking about the day
- giving compliments
- regular contact (telephone calls) when apart during the day
- socialising together with others
- giving presents
- joint discussion of purchases such as cars and holidays.



Repair strategies included:

- talking about problems
  - seeking outside help
  - conceding to the wishes of the partner
  - issuing ultimatums.
- 

You can see that there is clearly the potential for some strategies to be included in both categories; for example, gift giving and keeping in touch when apart can be maintenance or repair strategies depending on the motivations involved and the needs of the situation.

Dindia and Baxter found differences in the type of behaviours adopted that related to the length of marriage. Those that had been married longer tended not to use maintenance behaviours as much as those who had been married for only a short time. It was suggested that the long-married couples knew each other better and were more familiar with each other, so did not feel the need for specific maintenance behaviours as much as those in the early stages of marriage. Another suggestion was that couples who had been together for a long time took maintenance strategies for granted and in a sense failed to notice the significance of their behaviours. It could be that they had already invested so much in the relationship that each felt that the other did not need to be actively maintained.

John Gottman (1999) analysed videotapes of many couples' interactions over a period of 14 years. Through this extensive observational study, he found that couples who divorced tended to have four main problems: one or both partners spent a lot of time being critical of the other; one or both became very defensive when their faults were criticised; one or both tended to show contempt for the other; and one or the other refused to respond during disagreements. Couples in more happy and successful partnerships seem to find a positive way of dealing with the four problem areas of criticism, defensiveness, contempt and unresponsiveness. Gottman found that couples who were more successful tended to be more supportive and less critical of each other, which led to being more tolerant about each other's weaknesses (in other words, they weren't trying to change each other).

This section has looked at a range of research findings on the kinds of relationships we engage in as adults and how close intimate relationships evolve. The factors that help to maintain an intimate relationship can



vary considerably between couples but research suggests that such things as shared interests, the length of time the couple has been together, children, economic circumstances, individual expectations, past relationship experience and family support and culture are all relevant. And as for 'romance' and 'love'... well this elusive area of human psychology is perhaps the most difficult to evaluate! The bonding power of love can help to overcome all of the factors that might inhibit relationship maintenance, and the absence of love might not be compensated for by the presence of most or even all of the positive factors that help to maintain an intimate relationship.

## 4.5 What makes us happy – happy relationships

The economist Richard Layard (2005), in a wide-ranging piece of research, attempted to identify factors that make us happy. He identified a 'Big Seven' list of factors that promote feelings of happiness. These include satisfying work, good health and personal freedom, but number one on the list is family and other close relationships; close relationships were the biggest single factor that affected happiness.

From our earliest years, happiness is a central aspect of our emotional experience, provided, that is, that our other physical and emotional needs have been met. Anyone who has had contact with a baby will be aware of how easily a baby smiles, expressing happiness. Gurgling, attempts at 'raspberry' blowing and smiling characterise a baby's facial features. Smiling seems to be a baby's spontaneous reaction to seeing another human face. For younger children, playing together generates laughter and fun. The shared joke is a common feature of childhood friendships, as is the joyfulness or quiet contentment of engaging in cooperative play. Such behaviours suggest that once their basic physical needs have been satisfied, babies and children are generally predisposed to play and be happy. Certainly in research, when asked if they are happy, a significant majority of children responded with a clear 'yes'.

### Pause for thought

Researchers need to be wary of research that asks children simple questions in relation to their feelings, and organisations that do research with children are very much aware of this. Children could be especially prone to giving an answer that they think the adult researcher is looking for, or they might think that there is an





expectation that happy children are the norm, and their wish to conform to what is normal, rather than their genuine feelings, leads to them responding positively to questions about happiness. Can you think of other ways of measuring a child's happiness?

The adolescent years can be problematic for some individuals as they seek a more adult identity and the right to adult relationships with their families. But their relationships with friends do provide the basis for shared happiness, even if this happiness is sometimes achieved in a context of generally mild forms of rebelling against mainstream social values and norms.

Unfortunately, childhood is not a totally happy experience for all children. Concerns over the wellbeing of children in the UK were raised as a result of a recent **UNICEF** report (2007). The report, entitled 'Child poverty in perspective: an overview of child well-being in rich countries', looked at twenty-one developed countries and placed the UK at the bottom of the league, well behind less wealthy countries such as Poland and the Czech Republic. One of the significant factors involved in the UK's ranking was the poor quality of family relationships and relationships with friends and peers.

#### **UNICEF**

(United Nations International Children's Fund) a body of the United Nations that focuses on the protection, welfare and basic needs of children

The Children's Society launched an Inquiry into Childhood in the UK in September 2006. Initial findings challenge any assumptions that young people are overly interested in material possessions. After receiving comments from over 8000 young people, the Society reports that what are emerging as the most important elements for a good childhood are family and friends, and a feeling of being loved and supported.

The basic sense of wellbeing that can underlie close relationships can also enable people to deal with the problems that may arise during the course of their partnerships, including allowing disagreements to be more easily settled. Communication is an important aspect of all relationships, and close relationships in which happiness is a general feature do seem to be made up of people who are able to manage frequent, clear and open communication.

There is a range of research into happiness in adulthood which supports the view that our relationships with friends, family and partners provide the context that increases our potential to be happy.

## Activity 22 Remembering a happy occasion

Allow about 15 minutes

Think about the last time you could say you felt happy, and write a few brief notes about what was happening at that time and why it made you feel happy.

### Discussion

Was this a time when you were alone or when you were in the company of someone else? Research has shown that people report feelings of happiness more often when in the company of friends and family.

Robert Lane (2000, p. 6) considered what makes us happy and was able to identify the links between our feeling of wellbeing and relationships with family and friends. He argued that we gain happiness through our relationships with other people, especially those that are close to us. For Lane, 'it is their affection or dislike, their good or bad opinion of us, their acceptance or rejection that most influences our mood'.

Interestingly, Lane also found that increasing affluence did not lead to increased happiness but 'once people rise above the poverty level happiness tends to lie in the quality of friendships and of family life'.

Friends and family members tend to smile a lot when in each other's company and will tend to exchange positive and encouraging non-verbal communication – eyebrows raised and wide-eyed expressions, open arm gestures, nodding, standing face-on to others and similar ways of promoting friendly interaction. This is just the type of social context that can serve as a basis that can easily stimulate amusement and laughter, and feelings of wellbeing.

One way of making sure that we maintain our relationships is by appreciating the benefits we derive from them and expressing our gratitude. Gratitude is the feeling of thankfulness which involves a sense of emotional indebtedness towards another person. When we feel gratitude towards someone, we often feel a desire to thank a person or to reciprocate a favour they have done. When we express our gratitude, the act not only makes the other person feel good, but also boosts our own mood (Seligman, 2005). Several large-scale studies have shown that there are high associations between frequent expressions of gratitude and feelings of happiness, pride and hope. People can show their



gratitude in many ways – simply by saying thank you, or by writing a note, sending a gift or doing a favour.

Relationships can frustrate us or cause deep emotional pain, but our close relationships with other people – partners, family and friends – continue to be the most important source of human happiness.

## 4.6 Learning skills – recognising evidence

Your reading so far on Y183 *Starting with psychology* has emphasised how psychology involves the scientific study of people and their minds and behaviours, and how this science is based on gathering and interpreting evidence rather than simply falling back on common-sense assumptions. To this end, psychologists draw on a range of different types of research evidence, such as those derived from case studies, observation, surveys or interviews and experiments.

### Activity 23 Reviewing psychological evidence

Allow about 45 minutes

Return to Section 1.3 and check that you understand what is meant by the different research methods: case studies, observation, surveys/ interviews and experiments. Then flick through Chapters 2 to 4 and identify one interesting or especially memorable example of each of these research methods which produces the evidence that psychologists use. Write some notes using a table like the one below. Take your time with this exercise and use it as a way to revisit the learning materials and refresh your memory about what you have learnt.

Type of research	Study (brief description of research)	Evidence produced (i.e. what did the researchers find out?)
Case study		
Observation		
Interview/ survey		
Experiment		

### Discussion

It is likely that you found several different examples of each of these types of research. Chapter 2 contains some particularly good examples of case studies. Stories like these about people's actual experiences can

provide useful evidence to support theories about how the brain works. Chapter 3 offers examples of interesting experiments which have given clues about how we think about the world, for instance Luchin's research on the 'primacy effect'. Chapter 4 considers a study by Schaffer and Emerson where they observed the behaviour of babies to see if they had formed an attachment to the adults around them. Chapter 4 also offers a few good examples of survey/interview research which have provided evidence on how relationships evolve. For example, Dindia and Baxter's research shows how couples use maintenance and repair strategies in various ways.

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The examples identified above all highlight the importance of evidence for developing scientific knowledge. That's what makes the discipline of psychology a 'scientific study'.

## 4.7 Conclusion

In this chapter, you have read about the importance of close relationships at every stage in our lives and how they have a continual influence on people's thoughts, feelings and behaviour. For babies and younger children they are essential not only for social development but also for emotional and cognitive development. Adolescents find that close relationships are the place where they develop their identity and obtain the support they need to deal with the transition from childhood to adulthood. Our search for an intimate adult relationship influences the way that we present ourselves to others. Once this relationship has been established, we will behave in certain ways to maintain or, if necessary, repair it. Throughout our lives warm and caring personal relationships will promote feelings of wellbeing.

The wide-ranging nature of research into relationships can tell us a great deal about human behaviour in general and also has the potential to open up an area of human life that underpins our social lives, that is, our lives lived among other people. It is the influence of this larger social world that will be considered further in the next chapter.



## 5 Identifying social identities

### 5.1 Introduction

#### Identity

our sense of ourselves which comes from our characteristic way of behaving (our personality and what we do) and how others see us

**Identity**, the focus of this chapter, is a broad concept. It includes the way we view ourselves (for instance, what we consider to be our personality and characteristic ways of behaving) and how others see us (which, in turn, influences our behaviour and how we see ourselves). It also includes the way that we actively 'take up' certain identities. For instance, if you decided to 'take up' the identity of a Manchester United supporter, you might attend as many team matches as possible and wear the team shirt and scarf. In the process, you would be making a statement about yourself (and your identity as a fan) for others to see.

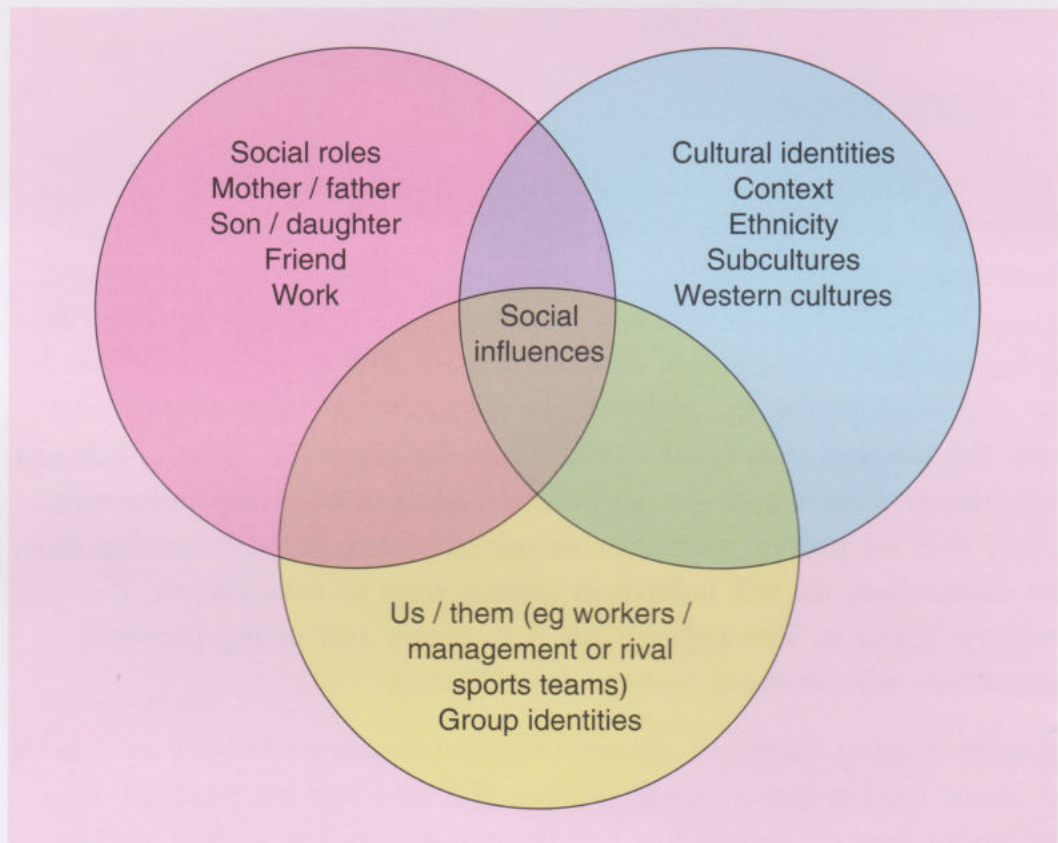


Figure 35 Social influences

One way of thinking about identity is to distinguish between *personal* identity (e.g. I am outgoing, I am prone to being anxious) to do with our individual personality and feelings versus *social* identity (e.g. I am a man, I am Welsh, I am Muslim, I am black, I am a New Labour supporter) to do with our broader identifications with social categories and groups. In this chapter you are going to concentrate on the latter – social identities – by exploring how people identify with different

groups, from family, friends and work to much larger categories such as nationalities and ethnic groups. This is one of the fields of interest of social psychology where, as you read in Chapter 4, the focus is very much on exploring the many social influences on people (Figure 35).

When we meet someone for the first time, we tend to ask questions such as 'what work do you do?' or 'where do you come from?'. By posing such questions, we are not merely being polite! We are, in fact, in the serious business of trying to establish our new acquaintance's social identity. We do this in order to discover points of connection with them, to work out to what extent they are the same as (or different from) ourselves.

Think about occasions when you've travelled to a new place and have struck up a conversation with a stranger. What topics might you touch on in your conversation as you're getting to know them? Can you ever remember feeling a sense of recognition and belonging on discovering that you and the stranger have something in common, perhaps enjoying the same music, living in the same area or working in the same field? Sharing a social identity with others promotes a sense of belonging. It makes us feel that bit closer to someone, even if we've only met through a chance encounter.

Sharing aspects of a social identity may also influence us to behave or act in certain ways. If you've been abroad, have you ever found yourself drawn to people of your own nationality and ended up comparing notes about the 'foreign practices' of the people in that country? Perhaps you found yourself becoming quite critical of the 'locals' and their strange ways. Later, looking back on the conversation, you may have wondered why you allowed yourself to become so negative. In other words, you suspect that you may not have expressed such views without the backing of the others of your nationality (the 'group'). This ability of shared social identity to influence our behaviour, which sometimes encourages us to act in ways we might not have done without feeling backed by the 'group', will be emphasised throughout this chapter.

In the previous chapters you have examined how individuals are influenced by their brain, thinking and relationships. Now you look more specifically at the social influences on people's identities, namely the influence of social roles, group identities and the cultural context. You start this chapter by exploring the way social roles influence our behaviour and identity (Section 5.2). In Section 5.3 you look at some of the ways in which people's group identities influence their behaviour.



Section 5.4 homes in on multiple social identities and how these are influenced by the cultural context. Section 5.5 then discusses these social influences in terms of 'what makes us happy'. The learning skills section highlights the skill of how to make use of evidence in your essay writing.

### The aims of this chapter are to:

- identify your own and others' social identities, and discuss how these are multiple, contextual and evolving
- explore the nature of the roles people play
- examine the power of groups to influence people
- describe ways that culture influences people's behaviour
- discuss the social influences on 'what makes us happy'
- introduce skills of how to use evidence in your essay writing.

## 5.2 Role play

If you were introducing yourself to someone, you would probably come up with many social categories – for instance: wife, mother, from Yorkshire, middle-aged, waitress, student, darts player, and so on. Lists of social categories like these mark out the social groups to which you belong and the different **roles** you play. These groups and roles – i.e. your 'social identity' – position you in society. These roles also influence the way you think and act, and what others expect of you.

In this section you look at the types of roles people assume, and how these may involve certain familiar 'scripts'. You then consider the influence of roles more generally.

### Identifying social roles

One way of spotting your social identities is to imagine that you are describing yourself to a stranger.

### Activity 24 Spotting your social identities

Allow about 20 minutes

Write down ten statements starting with 'I am ...'.

#### Role

a position within a group that determines appropriate behaviour for the person occupying it

Next, read back through your ten statements. This exercise usually produces two main types of answers: you will probably find that some of your answers are related to your social identities whereas other answers are related to your personality, feelings, abilities and/or interests.

Statements related to social identity are usually more objective, such as your age, gender, work, ethnicity, social class, relationships with friends/family members, nationality, regional identity, religious group, peer group culture, and so forth.

Reflect on which social identities are particularly important to you, and why. Do you tend to highlight them when you're meeting people for the first time? Do some of your important social identities tend to remain more hidden? What things do you do that might show others you have these social identities? Write a brief paragraph summarising your reflections.

## Discussion

Here is what two students said in response to these questions.

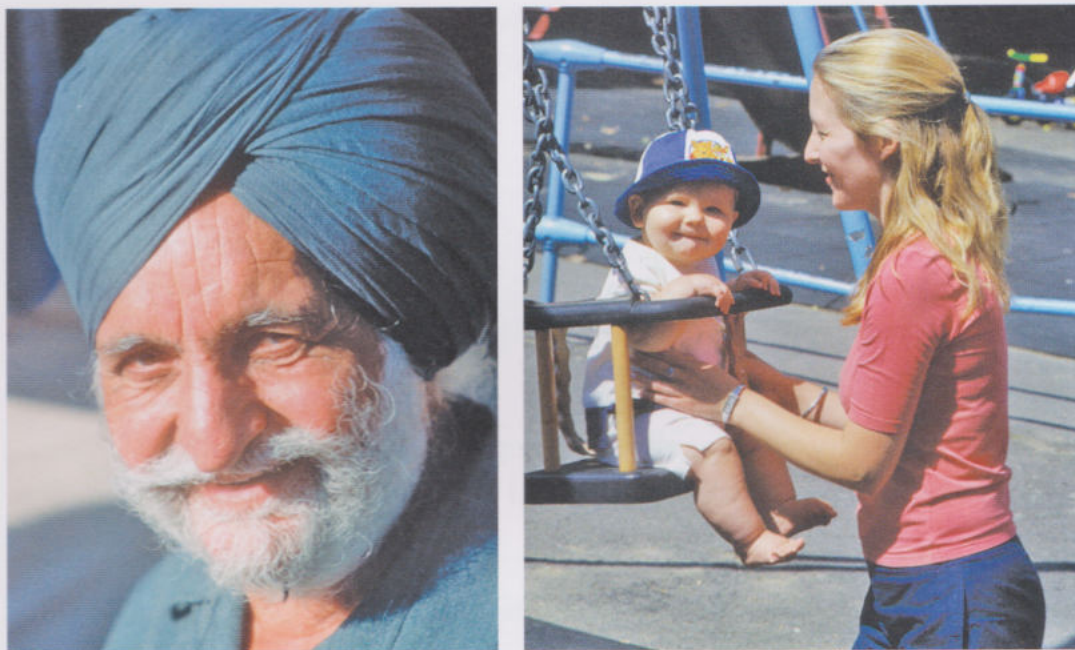


Figure 36 Two students

**Student A:** I guess 'mother' is my main identity and it is very important to me. I'm a single mother. I used to be in catering and I had hoped to go on to do some hotel management qualifications but getting pregnant has put those plans on hold. Now, I'm officially 'unemployed' but I don't like that category. Also, since I've become an OU student, my identity as a student is important to me. When I'm meeting people I'll often talk about 'doing OU' and it's amazing how often others seem to have studied with



the OU too! I probably emphasise being a student rather than saying I'm unemployed as I think others respect me more.

**Student B:** I have many identities – I am a manager, son, brother, community leader. Perhaps most important to me is my religion and my God. I am a Sikh and I carry symbols of my identity wherever I go; it's a source of pride. Wearing my turban and the other Sikh symbols I carry is a clear way of showing others my identity. My Sikh identity gives me a sense of belonging to that community. But it can also separate me from the wider British community. Often I'll meet a white British person and all they will see is my turban and how I'm different from them. All they see is my 'foreign-ness' and they ask me where I'm from. While my parents originally came from India, I'm a Londoner born and bred! I wish people would understand that.

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The activity above highlights how people have not just one social identity, but several. These social identities help define the roles people play in society. For each role there is a set of expectations attached about feelings, actions, behaviours, motivations and responsibilities. For example, mothers are supposed to be caring and patient; middle-aged people are supposed to be mature, more sober than young people, and less interested in going to discos. Of course, people don't necessarily follow all the expectations put on them (and they may enjoy actively rebelling against them!) but it's surprising how often they do fulfil attached expectations, almost without thinking about it. This is the power of roles.

In the next activity you examine further how the roles you play influence both the way you behave and how others respond to you.

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## Activity 25 Roles and expectations

Allow about 20 minutes

Focus on two social roles you frequently play. Jot down some notes on how being in these roles influences the way you think and act. Try to think of at least three behaviours or specific things you're expected to do or feel in each of the roles. Can you think of a time when you went against the expectations of your role? How did other people react?

## Discussion

The two students who answered in the previous activity expand their stories here.



**Student A:** My role of 'mother' means that a lot is expected of me. I'm always conscious of having to be the carer for my child and sometimes that can conflict with other roles, when I want to do other things. But my mother role comes first. I look after her, clean up after her, cook, organise her, help with the homework, take her to school, take her to her dancing class. It's a full-time job really! When I go and meet her teachers I probably should show how responsible I am by trying to dress a little more conservatively. The other side of me wants to rebel a bit and I sometimes find myself trying to shock the teachers! In another role as an OU student, however, I tend to be pretty well-behaved. I take notes, do the work, send in my assignments as I'm supposed to. I was never such a good student at school!

**Student B:** Two important roles for me are my role in 'work' and my role of being a 'member of the Sikh community'. My job is at a metal fabrication works where I am a supervisor so have to take on quite a lot of responsibility checking the work of others and quality standards. I organise my team and make sure they keep busy. As a member of my Sikh community group, we gather together once a week at our Gurdwara (Sikh temple) and read scriptures, have discussion groups, sing and eat together. As one of the more senior members I am often given the job of leading the discussions about the scriptures with our youth. I'm seen as being a mature, responsible citizen. However, I also surprise people when I go against this. As a Sikh I technically shouldn't drink alcohol. But I do. One elder of my community is often pointing out the error of my ways and how I set a bad example!

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The students above both recognise that their formal roles (of being a parent, student, manager or community leader) often involve a whole web of different behaviours and expectations. In the case of the first student, her mother role seems to involve many further informal roles, including being a 'carer', 'cleaner-upper', 'manager' and 'chauffeur'. Did this apply to the roles you identified too? For instance, a work role such as being a shop assistant can involve additional informal roles such as being 'the one who unlocks the shop in the morning' or 'the one who deals with difficult customers' or 'the organised one' or 'the one who does the window dressing'.

You can also apply this to your social group. Have you noticed how when going out with a group of friends people take on different informal roles, such as the 'joker' or 'gossip' or 'good listener' or 'the one who pushes others to have another drink'?



### Role conflict

tensions that occur when different or incompatible roles are taken on

The students also make an important point that roles can sometimes conflict, which may cause stress and pressure. Sometimes, a person can feel overwhelmed by having too many demanding roles: for instance, being a parent, spouse, worker, carer of an elderly relative, and friend. Also, feelings of role conflict can occur when individuals are forced into roles which are disagreeable to them or when the role demands are contradictory. An example here is how an older sibling may resent being the 'responsible babysitter' when they want to 'party' themselves.

Another example of **role conflict** would be the manager who has to reprimand a worker who is also a friend. Conflicts occur because the behaviours required in one role don't match the behaviours required in another. It's not in the 'script', as it were!

### Scripts and role taking

All the world's a stage,  
And all the men and women merely players.  
They have their exits and their entrances,  
And one man in his time plays many parts.

(Shakespeare, *As You Like It*)

### Script

an established pattern of social interaction followed by people in a particular social context

Picking up on Shakespeare's metaphor of life as 'a stage', Erving Goffman (1971) playfully suggests that people tend to take on certain roles, rather like actors. They present themselves to others. They give 'performances', put on 'masks' and follow certain '**scripts**' associated with their roles.

When an individual plays a role, Goffman says, they are out to play a part and to give or make an impression. A 'show' is put on for other people. For instance, Goffman might say that both the students in the last two activities are working to make an impression such as being 'a caring parent', 'a good student', 'a responsible citizen' and 'a committed Sikh'. In these ways we become our own spin doctors as we try to present ourselves to others in a positive light.

Consider the following scene which elaborates this stage metaphor:

A couple walks into a fancy restaurant (**theatre**). They have dressed up for the occasion (**costume and make-up**). They are ushered to their seats in the dining room (**stage**). The waiter (**actor**) hands them a menu (**prop**) and politely asks if they'd like a drink (**following the script**). The man confers with his partner, engages in some light banter with the waiter (**again according to script**) and orders a bottle of wine. When the waiter returns, he opens the bottle with a flourish (**playing up his role**) while the man makes a show of tasting the wine. He rolls it around in his mouth and then gives the waiter an appreciative nod. He makes a comment about the wine to his partner, trying to impress her with his expertise (**more acting**).

The food ordering follows a similar script, with the man conferring with his partner and fussing over special requests. The waiter is patient and polite, assuring the man that his requests will be noted. He then goes back to the kitchen (**backstage**). There, he laughingly mimics (**taking off his mask**) his fussy customers (**characters**) to the chef. As he returns to the table with the food, his professional 'front', or mask, is firmly back in place.

In the restaurant example above, both the man and the waiter are engaged in their respective 'performances', playing the 'roles' of customer and waiter with their associated 'scripts'. These scripts may not be followed precisely – Goffman accepts that often improvisation is involved – but they provide an outline guide for many of our interactions. As such they offer a sense of predictability and security.

Imagine how uncomfortable the couple above might feel if the waiter acted out of role, perhaps by sitting down at the table and joining in their conversation. Think of the simple familiar scripts that we all seem to engage in: for example, when we are asked 'How are you?' and reply 'Fine, thanks' even when we're not! Or how about the scripts we engage in when we're flirting with someone and chat-up lines are used?

For Goffman, the concepts of roles and scripts are a useful way of thinking about some of the particular ways we tend to present ourselves to others. Actors on a stage act out a role they have been given. They can't speak any old lines or perform any old character. People in ordinary life are under similar constraints. Our roles guide our conduct; that is, they influence our behaviour. A doctor in her surgery might



decide, for a day, to stop behaving like a doctor and behave like a patient instead. But it wouldn't go down well, would it? Patients expect doctors to listen to their health concerns, and not to monopolise the consultation by talking about their own medical problems.

Conversations in surgeries proceed on the basis of these pre-existing social expectations. Social roles, like actors' roles, tend to be impersonal – whoever takes on the role will be expected to act in more or less the same way with a few individual touches.

Some people play their roles well; others have trouble fitting the bill. As on the stage, there is often an extended period of training or rehearsal (socialisation) before the performance proper begins. In Chapter 4 you saw how children often practise adult roles in their play time – 'feeding the baby', 'driving the bus' or 'playing house'. These days children even have computer games which mimic the behaviours of whole families and offer a wealth of rehearsal possibilities.

Social psychologists argue that the process of becoming a social being emerges, at least in part, from role playing as children, as well as continuing throughout life. Children imitate the roles of the people around them and try them on to see how well they fit. This also carries on into adulthood as we learn how to behave from others and we try out new ways of behaving. Every time you change jobs, for instance, or become a parent, or become ill, or unemployed, or retire, a new process of self-education will take place as you acquire a new identity and learn to adjust to a new role.

### The influence of roles

While most psychologists accept that people's roles can influence their behaviour, they debate the extent of their influence.



#### Pause for thought

Goffman has drawn our attention to the way behaviour is guided by social relationships, contexts and expectations. At the same time he is arguing that people have some control over which roles and scripts they adopt and how they want to play their part. Would you agree that, to some extent, people choose who they want to be, or do you feel that people are largely forced into certain roles?

One well-known psychological experiment conducted in the USA by Philip Zimbardo and his colleagues in 1971 provides some evidence of the power of roles.

### The Zimbardo experiment

Zimbardo and his colleagues set up a simulated prison situation and randomly assigned a group of male participants to the roles of 'guard' or 'prisoner' (Figure 37). Their experiment, scheduled to last for two weeks, had to be stopped after only six days because the participants had taken their roles too seriously. The 'guards' became increasingly brutal and abusive, while the 'prisoners' became passive and showed signs of emotional disturbance. These findings seemed to show how quickly apparently 'normal' people – individuals neither prone to violence nor emotionally disturbed – could change simply because of the roles they had been assigned. These roles had seemingly been shown to undermine normal constraints on behaviour.



Figure 37 The Zimbardo experiment

### Activity 26 Roles and behaviour

Allow about 15 minutes

Are you surprised by the way that men not prone to violence or emotional disturbance could change their behaviour so quickly? Psychologists have debated how this can occur and have come up with many different explanations. Some, like Zimbardo, focus on the power of roles. However, in this study, none of the participants had had actual experience of being in a prison. So how did they know what the roles of prisoners and guards involved? From where do you think the participants got their ideas of how prisoners and guards behave?



Can you think of an occasion when you behaved 'out of character'? What do you put your behaviour down to? Write some brief notes describing the occasion and your explanation for your behaviour.

## Discussion

The participants' understandings of how prisoners and guards behave could have come from popular 1960s films such as *The Great Escape* and *Cool Hand Luke*. It is also possible that participants may have heard stories second-hand, from relatives for instance, about being a prisoner of war or the horrors of concentration camps during the Second World War.

In another example of expectations influencing behaviour, one normally very quiet student shared her experience of an occasion when she behaved out of character. She talked about 'going a bit wild' on a hen night. She thought this was somehow 'expected' of her based on her experience of hearing about other people's hen nights from her friends and from the TV.

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While Zimbardo's evidence at first sight seems persuasive, his experiment triggered a fierce debate within psychological circles. There was considerable criticism of the ethics of allowing people to be brutal or become distressed. (Nowadays researchers have to formally undertake not to do any harm to participants before they are allowed to proceed with an experiment.) Some have criticised the study for being based on limited selective evidence, in that sometimes the prisoners and guards also behaved out of role, yet this was not particularly reported. Zimbardo's analysis has also been described as simplistic for its failure to recognise that wider influences, and not just roles, may have shaped the behaviour of those participating in the experiment.

Psychologists critical of Zimbardo's work argue that a person does not passively and automatically act in terms of roles ascribed to them by others. Instead, much depends on the wider culture (such as the media) and whether or not the person takes on board these roles as part of their **self-concept** and believes in them (Reicher and Haslam, 2006; Turner et al., 1994). The questions at stake are: 'Under what conditions do people identify with roles given to them?' and 'When do they resist?'

### Self-concept

the set of ideas, beliefs and attitudes that we have about ourselves

### Pause for thought

Zimbardo's experiment sparked off considerable debate within the psychological community on the ethics of carrying out research that obviously caused distress for the participants. The question is, did the end justify the means? In other words, was the knowledge gained in this research so important that the distress of a small number of participants was a justifiable price to pay?

Zimbardo and his supporters claim that the distress was short-lived and the participants felt they had learnt valuable lessons about themselves. Also, the results have direct application to how prisons are run and the training of prison staff. Other psychologists take the position that, no matter how informative a study may be, there is no justification for causing distress to participants. What do you think?



In this section you explored the impact and influence of roles. One of the conditions which seems to increase the likelihood of certain roles being adopted is group pressure. It is to this topic that you now turn.

## 5.3 Group pressure

Do you remember hearing about 'Heaven's Gate', the Californian doomsday cult which combined elements of Christianity with belief in the existence of UFOs? (A number of popular TV programmes, including *CSI* and *The Simpsons*, have based storylines on this cult.) In March 1997, thirty-nine members of the group, led by Marshall Applewhite and Bonnie Nettles, committed suicide in the belief that their souls would be transferred to a spaceship hiding behind the Hale-Bopp comet. Most of the cult members had severed contact with their families and had sold their worldly belongings. They had committed themselves to a celibate life, with seven of the men submitting to voluntary castration (seemingly in preparation for a new gender-free level of existence).

Why did these group members engage in such extreme behaviours? Had they been brainwashed? Were they just weak and vulnerable, in effect easy targets for manipulation? While psychologists offer a variety of explanations, most would recognise a combination of emotional and social factors at work, and most would say that these go beyond the



individual, their personality and their roles. Cult bonds are often created through such factors as the emotional attachment to the group and fear of powerful leaders making people feel dependent on the group (Singer, 1995). People can be highly attracted by the security offered by membership of a group, where friends are apparently all around you and you feel cared for and safe.

It's worth looking more deeply at how social psychologists have explored the ways in which groups and group identity influence the way people think and act. In this section you will explore different strands of research to do with 'in-groups' and 'out-groups', as well as 'group pressure and conformity'.

### In-groups and out-groups

Activities 24 and 25 in the previous section show how we associate ourselves with several different social categories and groups. These group identifications can promote a sense of identity and belonging – identities which help us to define ourselves and others to define us. They can also raise our self-esteem and sense of status. The sense of group identity is then enhanced when we make comparisons between people like 'us' (the **in-group**) and people who are different, 'them' (the **out-group**). You can see this 'us' and 'them' thinking in many of the conflicts around the world today.

You can also see this thinking in everyday life, for instance played out with rival gangs or sporting teams. Teenage fashion is another great example. Consider, for instance, 'skateboard culture' and the dress code of this image-conscious group described by Janine Hunter:

Members of the group are dressed in a very relaxed and informal style. Baggy jeans, T-shirts, maybe a hooded top and a key chain hanging from the side of a leg. Some have a favourite band or rock legend printed on their T-shirt, whilst others have a logo ... Some of the skaters [are] wearing cut off shorts or rolled up jeans to three-quarter length, showing off their socks and trainers.

(Hunter, 2006)

#### **In-group**

people who belong to the group which we consider we also belong to

#### **Out-group**

people who do not belong to our group



Figure 38 Skateboarder group

Here is how one skateboarder describes the groupings demonstrating that group identity influences not only clothes (Figure 38) but also the behaviour and 'style' that group members adopt:

... there's the punk skaters and then there are the rap hip-hop skaters and then ... there are the people that are just, I dunno, whatever. Erm, basically you belong to one of those groups, you know, and it's the punk skaters that tend to be the ones that just throw themselves down the steps and do hand rails and stuff ... and hip-hop skaters tend to be like all techy, flippy crap and stuff ...

(Hunter, 2006)

## Activity 27 Us and them

Allow about 20 minutes

Read the following newspaper article. Can you spot any indications of an 'us and them' kind of thinking? There is more than one 'us and them' indirectly being referred to in the article.



## **Ross asks BBC: 'Where are all the black faces?'**

Jonathan Ross sealed his reputation as a man willing to flirt with the unsayable yesterday when live on BBC radio he criticised the concentration of black people in low paid jobs. The target of his wrath? The BBC itself.

Ross, renowned as a 'motormouth' chat show host, did not let his reported £6m annual pay stop him speaking his mind about his employer. Presenting his BBC Radio 2 show, he described a visit to the Chris Moyles show on Radio 1 where he met an employee with a small 'Afro' hairstyle. Ross demanded: 'How many black people have they got working on proper shows there? You know the BBC still haven't really come up to speed. I mean they are trying, God bless them.'

'Most of the guys you see there are either working on the door, carrying a cloth in there and cleaning up. We haven't really made the effort yet.'

The subject, which many employers would rather avoid, is especially sensitive at the BBC. Last year Mary FitzPatrick, its 'diversity tsar', told *The Observer* she believed foreign correspondents should be from the ethnic background of the country where they are based. She later denied this should be taken as a criticism of the likes of John Simpson and Fergal Keane for being 'too white'.

In 2001 the then director general, Greg Dyke, labelled the BBC 'hideously white' and incapable of retaining staff from ethnic minorities. Last night Dyke took issue with Ross on at least one point: 'It's certainly not true that there hasn't been an effort. While I was there I think we increased the total representation of ethnic minorities by two per cent.'

The BBC scrambled to answer Ross's broadside. A spokeswoman said: 'The BBC is committed to ensuring that the organisation has a mixed and diverse workforce to guarantee a good understanding of the whole BBC audience, which includes people from a wide range of ethnic and social backgrounds.'

She said the BBC was aiming for 12.5 per cent ethnic minority employees in the workforce and seven per cent in senior

management by December 2007. 'As far as what Jonathan Ross said, he was expressing his personal opinions.'

(Smith, 2007)

## Discussion

The clearest reference to 'us and them' is probably 'blacks versus whites in the BBC'. Did you pick up any others, such as 'BBC workers versus front-line presenters' or 'BBC employees versus senior management'? Often these types of notions of 'us and them' are subtle and can be difficult to spot unless you're a part of the in-group/out-group conflict.

Interest in the process of identification with groups received a strong impetus from a series of studies conducted in the 1950s and 1960s. Muzafer Sherif et al. (1961), for instance, conducted an often-cited series of experiments involving a boys' summer camp.

### Robbers Cave

The experimenters divided the boys into two groups. As expected, the groups became quite cohesive, involving **norms** of behaviour, jokes and secret codes. They set up a competition in the form of a tournament. Good sportsmanship quickly degenerated into overt group hostility, with name-calling, aggression and prejudice in evidence. Within the groups, however, group loyalty, solidarity and cooperation were at their height. The experimenters then further manipulated the group situation by introducing activities which required both groups to actively cooperate and positively work together. This proved quite successful.

#### Norms

the beliefs, expectations and standards of behaviour shared by group members

Experiments like these have demonstrated the significance of how conflict can arise through competition as groups interact over time. However, a series of other experiments known as the 'minimal group experiments' (Tajfel et al., 1971) shows something a little different. Tajfel and his colleagues showed that in-group favouritism and out-group discrimination can occur even when there is no history of involvement between groups. These researchers simply randomly assigned teenage boys to a kind of 'virtual' group. They were, in fact, working by themselves in a cubicle and just thought they were part of a



group. Without any contact with others in their 'group' and with no real conflict of interest, they still showed in-group favouritism!

Would it surprise you to know that these results have been replicated many times in North America and Britain? However, there is also some contradictory evidence. When Margaret Wetherell (1982) applied these minimal groups in New Zealand, she found that while white European New Zealand children showed the same pattern of behaviour as North American/British children, Pacific Island and Maori children did not necessarily opt for in-group favouritism. Instead, they repeatedly chose to benefit both groups, even if this meant their group getting less than the out-group. Wetherell explains how this made sense in terms of their cultural framework. She notes, for example, that in Polynesian societies, generosity is a mark of high status. Results such as these highlight the importance of wider cultural factors which affect our social identities and the extent of group influence.

Ideas about in-groups and out-groups form the basis of a psychological theory called **social identity theory**, first developed by the psychologists Henri Tajfel and John Turner (1979). The theory argues that our response to joining groups involves three key stages:

#### **Social identity theory**

a theory that describes how membership of social groups forms a significant part of the self-concept so that someone responds as a group member rather than an individual

- 1 **Social categorisation** Here we put ourselves and others into categories: for example, we label someone a rapper, a snob, a trekkie, a Christian, an Essex girl, and so on. These labels then become a shorthand way of implying other things about that person. (Didn't certain images come to mind when you read those labels?)
- 2 **Social identification** As soon as we are identified as belonging to one group rather than another, we take up that identity in our own and others' eyes. We become defined in a way that also has some emotional value or significance. What we and our group do is 'good', 'cool', and so forth.
- 3 **Social comparison** As members of a group, we then compare our group with others. In the process, we will define our group in positive terms, thereby reinforcing our own positive view of ourselves. There is also a competitive element in our response to other groups. Out-groups are seen in negative terms, and perhaps even actively discriminated against. Thinking well of ourselves and bolstering group self-esteem therefore becomes linked with discrimination against, and hostility towards, other groups.

Social identity theory highlights both how people's sense of who they are is defined in terms of a 'we' instead of simply an 'I', and that in-



group categorisation occurs in ways that favour the in-group at the expense of the out-group. People want to feel their own group (and therefore themselves) as being better than other groups.

Social identity theory is one of many different psychological theories put forward to explain some of the causes of racist attacks, group conflicts and wars around the world. While it would be too simplistic to say that all group conflicts are down to social identity (you already know that there are multiple influences on people), research evidence backs up the ideas of in-group favouritism and out-group discrimination playing a part. **Prejudice** based on this is a way of bolstering self-esteem in that it allows 'out-groups' to be seen as inferior.

The evidence suggests that the desire for self-esteem leads to inter-group competition and that these processes can escalate into open hostility and discrimination. In other words, simply categorising people into groups may be enough to generate conflict and prejudice between groups. The argument here is that individual differences between members of both in-groups and out-groups tend to be ignored. This results in stereotyping: oversimplified, distorted and one-dimensional portrayals of people, perhaps based on factors such as their gender, race, religion, profession, class or age. For instance, think about the stereotype of 'dumb blondes' which suggests that all blonde women are stupid, when the reality is that intelligence is not related to hair colour. Then there are more serious examples of stereotypes, for example, when a Muslim is wrongly assumed to be a 'terrorist'. Remember your reading in Chapter 3 which suggests that this occurs in people's thinking as a way of simplifying and organising a complex world. The problem with such unfortunate stereotypes is that they can have problematic, even critical, consequences.

Psychologists who have studied this subject argue that as we seek to make sense of our complicated, confusing world, we inevitably stereotype people to some degree. In a sense, people have to simplify and make generalisations. The problem arises when negative caricatures result in prejudice and are used to justify discrimination against one group by another. Such portrayals can profoundly affect how we value ourselves and relate to one another in groups.

### Groups and conformity

In the 1950s, Solomon Asch conducted what are now regarded as classic experiments on how individuals can be pressured to **conform** to

#### **Prejudice**

a biased attitude either for or more usually against something formed without knowledge, thought or reason

#### **Conformity**

the tendency for members of a group to behave in a similar way to other members of the group



## Group pressure

the demand by group members that individuals in the group conform to certain group standards/behaviours

a group's standard. The results of his experiments dramatically showed the influence of **group pressure**.

### Activity 28 Conformity and group pressure

Allow about 10 minutes

The text below describes one of Asch's (1955) experiments. As you read, try to imagine that you are a participant in the experiment and guess how you might have responded.

You are seated round a table with six other people, taking part in an experiment on the ways we perceive things. Your group is shown a picture of a straight line. You're all then given a picture of three more lines of different lengths. You are asked to pick out the line equal in length to the original one, as in Figure 39.

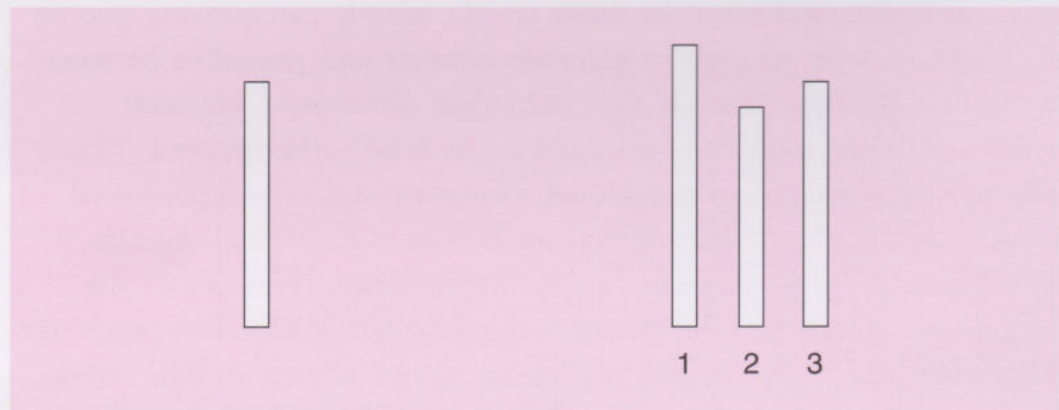


Figure 39 Is this line length similar to line 1, 2 or 3?

Each person at the round table identifies their own choice out loud – you're the last but one to speak. The first five people opt for line 2. Do you agree with them?

Can you think of an occasion in real life when you have been subjected to some form of group pressure? Perhaps you were in a pub and your friends pressed you to have another drink and stay a bit longer, when really you wanted to leave. What happened, and what did you do? What, if anything, would have swayed you to go along with the group? What would have encouraged you to hold firm? Write some brief notes describing your experience.

### Discussion

In Asch's experiment this exercise was repeated many times with many different line lengths. What you won't have realised is that the people in the experimental group, bar one participant, were actually all in league with the experimenter and occasionally gave the same false answers deliberately! What was being tested was whether or not the one genuine



participant felt the group pressure to conform to the others' opinions. So, did you?

Of course, it is impossible to say with this paper exercise whether or not you really would have succumbed to the influence of the group pressure. You might have conformed publicly but disagreed privately. (This is something that happened quite a lot in Asch's experiment.)

Some situations and groups somehow exert more pressure than others, and at some times more than at others. If you've experienced the pub situation, for example, you've probably found it easier to resist the pressure on some occasions and harder on others. The key then is to think about what ingredients make you want to conform; for instance, perhaps you are wanting/needing to be accepted, and approved of, by that group.

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Out of fifty participants in Asch's original study, 75 per cent conformed to an obviously wrong answer given by the rest of the group at least once. However, none of the participants conformed on every occasion when the group gave wrong answers.

Asch went on to investigate how variations in the experimental situation would affect the frequency of conformity and resistance to conformity. He increased the difficulty of the task so that the lines were of similar lengths, and found that conformity levels increased. Introducing an element of disagreement among the fixed group members encouraged the true participant not to conform. Also, allowing the participant to write down their answer rather than say it out loud resulted in much lower levels of conformity. This supports the suggestion that in the original experiments many participants were publicly agreeing with the majority but privately disagreeing.

However, Asch's results from the original experiment were still surprising as the correct answer was always very obvious. Some psychologists have suggested that the results Asch obtained were linked to the historical and cultural setting of the USA in the early 1950s as later studies or studies carried out in different countries have not always replicated Asch's findings. In the 1950s America was culturally very conservative. Also, the participants that Asch used in his study were college students, and colleges then were much more hierarchical than they became later. This cultural background could have encouraged an especially high level of conformity.



### **Collectivist culture**

a culture where group needs take precedence over individual needs and in turn the group takes responsibility for the wellbeing of the individual

### **Individualist culture**

a culture where the needs and achievements of individuals are emphasised

Rod Bond and Peter Smith (1996) reviewed a number of studies carried out in different cultures using the Asch line judgement task. They found that levels of conformity were much higher in collectivist cultures, such as China, than in individualistic cultures, such as the USA. **Collectivist cultures** tend to emphasise the needs of the group over the needs of the individual, whereas in **individualistic cultures** the needs of the individual take precedence. As collectivist cultures also stress the importance of adhering to group norms and supporting group decisions, it is not surprising that conformity levels will be higher.

Conformity is sometimes presented in a negative way, especially when we see participants being manipulated in an experiment to give obviously incorrect answers as a result of group pressure. However, it is worth considering that a certain level of conformity is necessary for any society to operate for the benefit of the vast majority of the members. It would be difficult for an audience in a theatre to enjoy a play if one person kept interrupting the actors and commenting loudly on the story. Also, it would probably feel very uncomfortable if the person in front of you on an escalator decided to turn round and stare at you as you travelled to the next floor.

In this section you've explored some of the work carried out by social psychologists on group identities. You've seen how people can take up certain group identities which can give them a sense of belonging and self-esteem or result in negatively stereotyping, and possibly discriminating against, out-groups. While pressures to conform to groups can make some individuals behave in ways that go against the grain, other individuals can resist such pressures. The group can both influence the individual and act as a source of individual empowerment. The influence of groups tends to work most powerfully when supported by the wider culture.

## 5.4 Culture and context

Your reading so far has shown how people's sense of self can change according to their roles and the group context. Some social psychologists push this idea even further, arguing that our identities are so fluid that we could be said to have 'multiple selves' which emerge and evolve according to the social context we're in and the broader cultural context (Wetherell and Maybin, 1996). This section explores further the impact that **culture** has in shaping our social identities.

### **Culture**

the history, values, customs and institutions of a group of people unified by, for example, ethnicity, nationality or language



## Activity 29 Multiple selves?

Allow about 15 minutes

Can you think of an example where you were conscious of having different 'selves' or identities, depending on the context and culture you were in? Thinking back over the last ten years, have you noticed new identities evolving within yourself? Jot down your thoughts on both these questions.

## Discussion

Here is what one student in London said in response to these questions:

I know when I go back home to Glasgow I kinda revert to how I used to be. I find myself talking broad Glaswegian. I don't think my friends in London would begin to understand me! It also works the other way, my family would be surprised to see me at work where I'm now quite posh and professional. This is a new side of me that's developed over the last five years. Also, my identity as a university student is new and I can see new sides of me come out that I didn't even realise I had.

Picking up these ideas, the psychologist Jerome Bruner argues against the view that personality is somehow contained in an individual's body. Instead, he sees people as fluidly mingling with the social world. The self, he suggests, is best understood not as a pure and enduring core but as 'the sum and swarm of participations in social life' (Bruner, 1990, p. 107). Just think of people's work, their children, their friendships, their daily activities and interactions, Bruner argues. These are all a part of them; they define who they are. People's identities are in fact distributed well beyond the boundaries of their physical bodies.

These ideas come from a particular theory in social psychology called **social constructionism**. Psychologists who call themselves social constructionists believe that the social world – its history, culture, social practices, social relationships, the patterning of everyday interactions and conversations – should be at the heart of psychology (Phoenix, 2002). They argue for a merged view of the person and their social context where the boundaries of one cannot easily be separated from the boundaries of the other. People, with all their different social

### Social

#### constructionism

a psychological theory which emphasises how the ways in which we understand the world are constructed between people in everyday social interactions



selves and identities, are seen as being social through and through. (Other psychologists, as you may have picked up from your reading in the previous chapters, tend to disagree and would give more weight to other factors, such as the brain and the thinking mind.)

These are quite difficult ideas. To help you to get a handle on them, in this section you concentrate on a story from one particular research study. This research was carried out by a person who temporarily moved to another culture. Here she gained an understanding of her sense of self as involving multiple, contextual and evolving social identities. As you read this story – a fascinating personal account from Dorinne Kondo (1990) – you will see how different group identities related to gender, ethnicity and culture tend to merge in practice.

Kondo is a Japanese American, born and raised in the USA, who goes to live in Japan to do some academic **anthropological** research. Here the researcher simultaneously takes part in a community while acting as a scientific observer – a method of research that psychologists call **participant-observation**. In Kondo's case, her experience of immersing herself in Japanese culture over the course of 26 months becomes challenging and disturbing. She finds her 'American identity' gradually fading into the background as a new 'Japanese identity' (what she calls 'the Other') comes to the fore.

Through her relationships and interactions with Japanese people, she finds that she is being subtly trained in new sets of behaviours and routines, such as the traditional tea ceremony (Figure 40) and other mealtime rituals. She eventually learns what to do and say in order to present herself as a proper Japanese woman. But this is not just a social mask which she presents to the outside world. As Kondo makes clear, she is acquiring new ways of being and a new sense of self in relation to other people (Wetherell and Maybin, 1996).

### **Anthropology**

the scientific study of the origin, the behaviour and the physical, social and cultural development of humans

### **Participant-observation**

a method of research where the researcher is both an observer and a participant



Figure 40 Japanese tea ceremony

### Activity 30 Thinking about Kondo's story

Allow about 40 minutes

Read Kondo's story below. The story has been taken from her book, so many details are missing. However, you should be able to get a sense of the challenges she faced and an idea of the kind of depth and detail of data that can be obtained with participant-observation studies taken from 'real life'.

At times, Kondo is talking about quite deep and complex material. Don't worry if you're not entirely clear about what she means. Just try to get a sense of her story and what her experiences suggest about the nature of identity.

After reading the story, take some time to really digest Kondo's account and analyse what is being said about social identities. To help you to do this, write some notes on the following questions:

- What different social roles does Kondo identify herself as playing?
- What social expectations does Kondo feel surrounding her position as a young Japanese woman?
- What differences does Kondo find between the culture and cultural expectations of Japan and western societies such as America and Britain?



- How do these influence her behaviour?
  - What is Kondo saying about the nature of social identities?
- 

### Kondo's story

As a Japanese American, I created a conceptual dilemma for the Japanese I encountered. For them, I was ... someone who was both Japanese and not Japanese. Their puzzlement was all the greater since most Japanese people I knew seemed to adhere to an eminently biological definition of Japaneseness. Race, language, and culture are intertwined, so much so that any challenge to this firmly entrenched conceptual schema – a white person who speaks flawlessly idiomatic and unaccented Japanese, or a person of Japanese ancestry who cannot – meets with what generously could be described as unpleasant reactions.

[...]

Indeed, it is a minor miracle that those first months did not lead to an acute case of agoraphobia, for I knew that once I set foot outside the door, someone somewhere (a taxi driver? a salesperson? a bank clerk?) would greet one of my linguistic mistakes with an astonished 'Eh?' I became all too familiar with the series of expressions that would flicker over those faces: bewilderment, incredulity, embarrassment, even anger, at having to deal with this odd person who looked Japanese and therefore human, but who must be retarded, deranged, or – equally undesirable in Japanese eyes – Chinese or Korean. Defensively I would mull over the mistake-of-the-day. I mean, how was I to know that in order to 'fillet a fish' you had to cut it 'in three pieces'? ...

For me, and apparently for the people around me, this was a stressful time, when expectations were flouted, when we had to strain to make sense of one another ... For my informants, it was clear that coping with this anomalous creature was difficult, for here was someone who looked like a real human being, but who simply failed to perform according to expectation. They, too, had every reason to make me over in their image, to guide

me, gently but insistently, into properly Japanese behaviour, so that the discrepancy between my appearance and my cultural competence would not be so painfully evident. I posed a challenge to their sense of identity. How could someone who looked Japanese not be Japanese? ...

My guarantor, an older woman who, among her many activities, was a teacher of flower arranging, introduced me to many families who owned businesses in the ward of Tokyo where I had chosen to do my research. One of her former students and fellow flower arranging teachers, Mrs Sakamoto, agreed to take me in as a guest over the summer ... During my stay with the Sakamotos, I did my best to conform to what I thought their expectations of a guest/daughter might be. This in turn seemed to please them and reinforced my tendency to behave in terms of what I perceived to be my Japanese persona.

My initial encounter with the head of the household epitomizes this mirroring and reinforcement of behaviour. Mr Sakamoto had been on a business trip on the day I moved in, and he returned the following evening, just as his wife, daughter, and I sat down to the evening meal. As soon as he stepped in the door, I immediately switched from an informal posture, seated on the zabuton (seat cushion) to a formal greeting posture, seiza-style (kneeling on the floor) and bowed low, hands on the floor. Mr Sakamoto responded in kind (being older, male, and head of the household, he did not have to bow as deeply as I did), and we exchanged the requisite polite formulae, I requesting his benevolence, and he welcomed me to their family. Later, he told me how happy and impressed he had been with this act of proper etiquette on my part. 'Today's young people in Japan,' he said, 'no longer show such respect. Your grandfather must have been a fine man to raise such a fine granddaughter.' Of course, his statements can hardly be accepted at face value. They may well indicate his relief that I seemed to know something of proper Japanese behavior, and hence would not be a complete nuisance to them; it was also his way of making me feel at home. What is important to note is the way this statement was used to elicit proper Japanese behaviour in future encounters. And his strategy worked. I was left with a warm, positive feeling toward the Sakamoto family, armed with an incentive to behave in a Japanese way, for clearly these



were the expectations and the desires of the people who had taken me in and who were so generously sharing their lives with me ...

The more I adjusted to my Japanese daughter's role, the keener the conflicts became. Most of those conflicts had to do with expectations surrounding gender, and, more specifically, my position as a young woman. Certainly, in exchange for the care the Sakamotos showed me, I was happy to help out in whatever way I could. I tried to do some housecleaning and laundry, and I took over the shopping and cooking for Mr Sakamoto when Mrs Sakamoto was at one of the children's association committees ...

The problem was, in fact, the etiquette surrounding the serving of food that produced the most profound conflicts for me as an American woman. The head of the household is usually served first and receives the finest delicacies; men – even the sweetest, nicest ones – ask for a second helping of rice by merely holding out their rice bowls to the woman nearest the rice cooker, and maybe, just maybe, uttering a grunt of thanks in return for her pains. I could never get used to this practice, try as I might ...

The demands and obligations of Japanese social life came to assume increasing importance in my life ... I felt bound by chains of obligations ...

At a tea ceremony class, I performed a basic 'thin tea' ceremony flawlessly, without need for prompting or correction of my movements. My teacher said in tones of approval, 'You know, when you first started, I was so worried. The way you moved, the way you walked, was so clumsy! But now, you're just like an ojodashsan, a nice young lady.' Part of me was inordinately pleased that my awkward, exaggerated western movements had finally been replaced by the disciplined grace that makes the tea ceremony so seemingly natural and beautiful to watch. But another voice cried out in considerable alarm, 'Let me escape before I'm completely transformed!' And not too many weeks later, leave I did.

(Kondo, 1990, pp. 9, 11–24)



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Before reading on, check that your notes have answered the four questions given at the beginning of this activity.

## Discussion

Did you spot the five roles Kondo mentioned of daughter, guest, young woman, student and prodigal Japanese? You probably noted how Kondo described feeling some obligation to take on 'housewifely' roles of shopping, cooking, cleaning and doing the laundry. But there were also other obligations related to her daily life practices, such as the way she was expected to be subservient during mealtimes (serving the male head of the household). Very little was said about the obligations involved in carrying out the traditional Japanese 'tea ceremony'. However, Kondo does indicate the importance ascribed to women adopting delicate, graceful, disciplined bodily movements.

There were a number of hints throughout Kondo's story of differences between the culture she experienced in Japan and her own western way of life. Perhaps you were particularly struck by the etiquette that was demanded for the serving of food. Do you feel, like Kondo, that in Japan social obligations play a more important part in everyday life than in western society? What is also very evident in Kondo's account is the communal nature of social life and the two-way nature of social interaction. One does not become 'socialised' by oneself.

Kondo's story demonstrates powerfully the social constructionist idea of the intertwining of the individual and the social context. Specifically, her experience suggests that we have multiple social identities which continue to evolve as we grow older or when we move into new situations. In addition to being an American woman and academic researcher, Kondo also becomes a Japanese woman. She has other social identities to do with her relationships with the Sakamotos (e.g. she is their guest, a student and something of a 'daughter'). Each of these identities carries with it certain expectations for how she should behave and what she should do.

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A key lesson from Kondo's story is how the process of socialisation is relational (i.e. about relationships) and always involves others in particular contexts. This is what Bruner means when he talks of people's selves being 'the sum and swarm of participations in social life' (1990, p. 107). In this way, our identities – including our roles, groups, gender/ethnicity and cultural identities – can be understood as being



socially constructed by others. As Kondo's story underlines, social identities are contextual, multiple and evolving.

## 5.5 What makes us happy – social influences

So far in this chapter you've learnt that the roles we play, the groups we identify with and the cultures we belong to are all factors which influence our behaviour. They are also involved in making us happy. In this section you explore two of these social influences in more detail: roles and culture. Underpinning these influences is the importance of developing positive, supportive relationships. As you discovered in Chapter 4, these contribute significantly to people's happiness.

### Roles and happiness

It perhaps won't surprise you to learn that the roles people play can be a source of both happiness and unhappiness. In general, people want to feel needed, supported and valued, and this applies to the roles that they play. A person who feels loved and respected in their family roles is likely to be happier than one who is not valued or who feels overburdened by conflicting roles. A person who gains some self-esteem and a sense of belonging from being a part of a group is also likely to be happier than one who has few group roles and identifications.



#### Pause for thought

To what extent do you think people can feel happy or depressed simply as a result of identifying with the success/failure of their 'group'? Think of different examples here, such as how people feel when the sports team they support has won/lost or if their favourite band breaks up.

People's work roles (involving formal employment, housework, being a carer, voluntary work or studying) can be a particular source of happiness or unhappiness. Work can provide us with not only an income but also some kind of meaning to life – an outlet for creativity, the feeling of being productive and a structure and meaning to the day. Peter Warr (2007) likens work to taking vitamins – a certain level is essential for health and wellbeing. Unemployment (in the broadest

sense) can reduce happiness by destroying self-respect and the positive social relationships created by work (Layard, 2005).

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### Activity 31 Does your work make you happy?

Allow about 20 minutes

Think about the work you do (whether this is a paid job or work in the home or voluntary work) and the extent to which this work role helps you to feel happy by giving you a sense of satisfaction and meaning. To help you to do this, reflect on the following questions, which have been adapted from Warr's research on the factors which help to make work a positive experience. He argues that factors such as 'opportunity for control' are 'vitamins for mental health'.

Does your work give you any of the following?

- **Opportunity for control:** Do you have control over what work you do and how you do it, or are you closely supervised?
- **Opportunity for using your skills:** Are you able to use your skills, and do you have the right skills for the work you do?
- **Achieving goals:** Are you able to do your work to a satisfactory level, or is your work too demanding?
- **Variety:** Do you have variety in the work you do, or is it repetitive?
- **Clarity:** Are you clear about what your work requires, and do you receive regular feedback that is helpful to you?
- **Reward:** Are you content with your standard of living, and are you rewarded fairly for the work you do?
- **Physical security:** Are your working conditions satisfactory, and do you feel safe at work?
- **Opportunity for interpersonal contact:** Do you have good supportive relationships with the people you work with?
- **Valued social position:** Is your work valued, and do you feel you make a contribution to others or your organisation?

### Discussion

It is possible that you answered 'It depends ...' or 'Sometimes ...' for several of these questions. There are always good and bad sides to work, and everyone has good and bad days. Reflecting on questions like these, however, may help you to pinpoint what you find beneficial and problematic in your work.

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## Culture and happiness

Psychological researchers have engaged in vigorous debate about what kind of culture promotes the greatest happiness. They especially disagree on whether living in the western world or the economically developing world is a happier experience. Of course, much depends on how you define and measure 'happiness', and who is doing the research and in what context.

Researchers who argue that people living in western cultures are generally happier point to research on 'satisfaction with life'. According to Adrian White (2006), people tend to associate happiness most closely with health, followed by wealth and education. In a study based on a survey of over 80,000 people across 178 different countries, White came up with a 'happiness' ranking of countries. Top of the list was Denmark, followed closely by Switzerland, Austria and Iceland. The USA came 23rd, while the UK came in at number 41. The least happy countries were Zimbabwe and Burundi.

The psychologist Alan Carr (2004) argues that socio-political factors play an important role in determining happiness, with people living in conditions of greater social equality reporting a greater sense of subjective wellbeing. Subjective wellbeing is also found to be higher in welfare states, in countries where public institutions run efficiently, and in countries without undue political oppression or military conflict. War (with all the terror and loss that is unleashed) is seen to cause particular misery. For all these reasons western, social-democratic countries tend to score better on some happiness surveys – particularly the ones carried out by western researchers.

However, other researchers suggest that people living in economically developing countries may enjoy greater levels of happiness – defined here more in terms of feelings of 'contentment' – than do wealthy westerners. In 2006, the new economics foundation (nef) found the Pacific island nation of Vanuatu to be the happiest place on earth. Peter Forster explains:

Vanuatu is a very poor country [yet the people] ... have very strong social support systems within their villages and extended families. When they are fit and healthy they work for their community. When they go through hard times they are supported by others ... It is very striking when walking around Vanuatu, just how many strangers smile, wave and greet you as you go by ... If

the processes of urbanisation (mainly people moving from outer islands to the capital in search of money and jobs) continues, which disrupts their traditional sources of support and their family and communal relationships ... their happiness will decline.

(Forster, 2006)

Layard (2005), noting that science and technology have both positive and negative consequences, argues that on some happiness measures western countries might score less well. As evidence, he cites the following story:

The king of Bhutan, the small, idyllic Buddhist kingdom nestling high in the Himalayas ... made a fateful decision: ... in 1999 the ban on TV was lifted ... so the Bhutanese could see the usual mixture of football, violence, sexual betrayal, consumer advertising, wrestling and the like. They lapped it up, but the impact on their society provides a remarkable natural experiment in how technological change can affect attitudes and behaviour. Quite soon everyone noticed a sharp increase in family break-up, crime and drug taking. In schools violence in the playground increased ... The 'impact study' by some local academics showed that a third of parents now preferred watching TV to talking to their children.

(Layard, 2005, pp. 77–8)

Social psychologists would probably agree that all the factors mentioned in the examples of research above are relevant to happiness. People with productive and satisfying roles, good health, a reasonable level of wealth, access to social welfare, a strong sense of community, and living in politically stable societies tend to have higher levels of happiness. While researchers argue about whether the greatest happiness can be found in western or economically developing nations, all accept the significance played by the social context in which people live.

## 5.6 Learning skills – making use of evidence

The learning skills section of the previous chapter highlighted how different research methods, such as experiments, have helped psychologists to come up with convincing evidence to back up their



claims and theories. Here, you think about applying these same principles to your own essay writing.

One of the key skills of doing academic work is being able to construct a plausible, persuasive, coherent argument. The word 'argument' here does not mean a fight. Instead, it's about offering a reasoned discussion using examples and research evidence to illustrate or support the points you're trying to make. Think about how lawyers in court build and argue their 'case' by laying out the evidence. When you make an academic argument, you're trying to do the same kind of thing in terms of finding the evidence and then presenting it strategically.

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### Activity 32 Gathering evidence

Allow about 30 minutes

Look back over this chapter. What evidence from research studies can you find to support an argument that group membership can influence people in positive ways? Can you also find evidence from research studies to support an argument that group membership can influence people in negative ways?

### Discussion

Many of the research studies in this chapter can provide evidence of both positive and negative influences.

For example, some positive effects of belonging to a group are a sense of identity, belonging, acceptance, support and cooperation. Membership of groups can also increase our self-esteem and our sense of status, especially when we compare our in-group with out-groups.

Evidence for positive influences can be drawn from Sherif's Robbers Cave experiment. When the two groups were initially set up, the boys quickly developed a set of group norms which helped to develop a sense of group identity and gave the members a feeling of belonging. Similarly, in Kondo's story she reported how pleased she was to receive praise after performing a tea ceremony. Behaving in a proper Japanese way resulted in praise and a greater degree of acceptance.

However, group membership can also have negative effects. People can be influenced to act in ways which run counter to the way they might normally behave. In some cases this can develop into prejudice and even discrimination against other groups.

Sherif's Robbers Cave experiment also provides evidence of the negative effects of group membership. When the two groups of boys were brought together in a competition, they were hostile to each other and engaged in

aggressive behaviour directed at the out-group. Zimbardo's prison experiments showed how quickly the guards became brutal and abusive, while Asch's experiment showed how individuals conformed and gave an obviously wrong answer to a simple question because the rest of the group did so.

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When you write an essay and support your argument or discussion by citing evidence, remember that you need to give references. This means that you are acknowledging the work of other people and it gives your reader the opportunity to refer to the book, article, DVD or website that you have referenced.

## 5.7 Conclusion

In this chapter you have explored a range of social influences on people's behaviour and seen how individuals have multiple identities which evolve in different contexts. You've also seen how roles and both group and cultural identity can be created, affirmed and re-created, and how they can powerfully influence a person's thinking and behaviour. Belonging to groups – in the broadest sense – gives people a sense of belonging and self-esteem. At the same time, people can feel pressured to conform, and the feeling of group identity can degenerate into competitiveness with out-groups which may, in turn, escalate into conflict and discrimination.

This chapter has also discussed the way psychologists approach the topic of social identities. You've become familiar with two important psychological theories which different social psychologists support: social identity theory and social constructionism. You've also seen how psychologists use a range of research methods to explore social identities, including experiments and participant-observation. Psychologists use the data and findings from their research to develop and support their theories. This is the skill of using evidence which you've practised in this chapter and the previous one.



## 6 What makes us who we are?

### 6.1 Introduction

At the very beginning of this module you read that the ‘most important and greatest puzzle’ that we face as humans is ourselves (Boring, 1950, p. 56). Throughout *Starting with psychology*, you’ve seen just how much of a puzzle we are – one that is complex, subtle and multi-layered – and it gets even more complicated as we evolve over time and change in different contexts.

When answering the question ‘What makes us who we are?’, psychologists – as you now know – put forward a range of explanations about why people feel, think and behave the way they do. Just when psychologists seem to understand one bit of ‘who we are’, up pops some new evidence to show a different side! It is not easy to pin down all the many influences.

Each of the previous chapters of this book has focused on one approach to explaining ‘What makes us who we are?’. In this chapter you will have the opportunity to combine a number of different possible explanations to try to get a more complete picture of why a person thinks or acts in a certain way.

You have seen, from your reading of previous chapters, how people can be influenced by different aspects such as their brain and biology, thinking, relationships and social identities, and how different types of psychologists (biological, cognitive, developmental and social) tend to favour certain explanations. Now it’s time to put those pieces together and recognise that there are invariably multiple influences at work. This is the key lesson of this chapter.

You start this chapter by examining the multiple and interlinking influences at work on people’s minds and behaviour, coming from both inside and outside the individual (Section 6.2). Section 6.3 then applies these ideas to the question of ‘What makes us happy?’. The chapter ends by recognising that debate is at the heart of psychology, and you are introduced to the learning skill of engaging in debate.

### The aims of this chapter are to:

- analyse a range of factors within and outside individuals which influence mind and behaviour
- consider multiple influences in two case studies, involving an aggressive response in a football match and an account of depression
- describe the way that influences are interlinked in complex ways
- discuss the multiple factors involved in what makes us happy
- introduce the learning skill of engaging in debate.

## 6.2 Multiple influences

Human beings are complex and it's rarely easy to work out exactly why someone thinks or behaves in a certain way. An interplay of factors is invariably involved both within the individual themselves and outside to do with their wider social context.

Factors within the individual include their biology, their thoughts and their feelings. Influencing factors coming from outside include things like relationships, social identities and the wider culture.

However, what is happening 'inside' and 'outside' a person is invariably interconnected. For example, when we think about something, it's usually related to something outside ourselves. Some psychologists argue that the inside is really a reflection of what's going on outside, so it can't be separated out. 'There is no inner man', a philosopher called Maurice Merleau-Ponty (1962, p. xi) explains; 'man is in the world, and only in the world does he know himself'.

That said, the words 'inside' and 'outside' offer a useful shorthand description (and one that fits this book nicely): 'inside' factors are the ones discussed in Chapters 2 and 3, while 'outside' factors are explored in Chapters 4 and 5. Looked at another way, you can see the 'inside' referring to personal factors to do with the individual themselves, while the 'outside' relates to social influences where other people are involved.

You will now look at two case studies which will give you an opportunity to think about a number of different influences which played a part in affecting one person's behaviour.



## The Zidane head-butt

The first case that will be considered is a head-butting incident by a footballer in the 2006 World Cup Final between France and Italy. The two players involved are Zinedine Zidane, playing for France (in the white strip in Figure 41), who head-butted the chest of Marco Materazzi, who was playing for Italy.



Figure 41 Zidane head-butts Materazzi



### Activity 33 The incident

Allow about 10 minutes

Watch the video entitled 'The Zidane incident'. It lasts for less than a minute; you might want to watch it several times. Make some notes to describe what happened.

### Discussion

The clip starts with Materazzi moving to stand behind Zidane and then holding on to him with an arm round his chest. Both players are looking in the direction of the ball. Materazzi lets go of Zidane, and Zidane looks towards Materazzi. Materazzi says something and pats Zidane on the elbow. Both players start to move down the field while talking to each other, then Zidane begins to jog so that he is in front of Materazzi. Zidane turns and then steps towards Materazzi while lowering his head, and then head-butts him in the chest. Materazzi drops to the ground.

Was your description similar to the one given above? Did you simply describe what you saw or did you go beyond what you saw and include some interpretations of the behaviour? It is very tempting when observing behaviour to go beyond what you see and start to make inferences. For

example, if you watched someone being told a joke by another person and then laughing, it would seem reasonable to describe the situation by saying that the person found the joke funny and laughed. The laughing is an observable action, but the suggestion that they did so because they found the joke funny is an inference. We don't know conclusively that they found the joke funny, we just think we know. There could be a number of other reasons for the laughter. Some people laugh when they feel nervous, or the joke may have caused feelings of anger which the person was attempting to disguise, or they may even be laughing at something completely different that they can see or something else that they are remembering.

There is nothing wrong about making inferences and trying to interpret or explain behaviour – much of this book has been concerned with attempts to interpret behaviour by looking at different possible explanations. However, it is important to distinguish between what you observe and how you might interpret this behaviour, because it is often the case that several different interpretations may be possible.

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In the Zidane incident, now that we have a description of what happened, the next step is to attempt some explanations for this behaviour. However, first it might help if you have some more background information about Zidane.

### Zidane's background

Zidane was born in 1972 in the French city of Marseilles to parents who came originally from Algeria. He is the youngest of five children, and the family lived in a working-class district of the city called La Castellane. Zidane began his football career early and was playing in the junior league at the age of 14 and in First Division football at the age of 17. He developed into a world class player and was three times named World Player of the Year. The 2006 World Cup Final was to be his last game of professional football before he retired.

The head-butting incident occurred in the 110th minute of the game, when the game had gone into extra time, and it resulted in Zidane being sent off. He was not able to take part in the penalty shootout, which Italy won 5–3. This was a very sad end to an outstanding football career for Zidane, for his fans and for France.



What followed was hours of debate and discussion in the media and at social gatherings when people tried to answer the question of 'why?'. What made this footballer react so aggressively – and some would say stupidly – in such an important match and at such an important time in the match? Zidane stated that he had been provoked by Materazzi who had made insulting remarks about his mother and sister. Materazzi insisted that he had made some trivial remarks and had said nothing about Zidane's mother.

Even if you're not very interested in football, perhaps you have some views about why footballers might behave this way. In the next activity, you are given the opportunity to hear different people's views. You will explore the different explanations people put forward about what made Zidane behave that way.



### Activity 34 Why did he do it?

Allow about 20 minutes

Before watching the next video, make some notes listing all the different explanations that you can think of for why Zidane head-butted Materazzi. It might help if you think about the different influences you have read about in this book. Can you suggest any factors related to Zidane's biological state, thinking, relationships and social identities that could help to explain what happened?

Once you have completed your notes, watch the video 'Everyday explanations', which shows some members of the general public offering their views on what happened. Compare your explanations with theirs.

### Discussion

Did you find that your explanations covered more sources of influence than those of the general public? It is worth thinking about the way you would normally regard the behaviour of a footballer who 'hits out'. Have you been inclined to explain such behaviour in simple or straightforward terms, such as saying, 'it all comes down to ...'? Has studying this module made a difference or helped you to see some other possibilities?

Next you'll look at the explanations proposed by three psychologists who are focusing on three different types of influence.



## Activity 35 Explanations from three psychologists

Allow about 30 minutes

Now watch the video 'Psychological explanations'. This shows three psychologists – one biological, one cognitive and one social – giving their interpretation of what happened. Make notes of the key points of each explanation.

### Discussion

The biological psychologist suggested that there may be a genetic predisposition for men to react to provocation with physical aggression more than women would. The role of testosterone is not clear, although there is a link between this male sex hormone and aggression. However, the stress engendered by the situation that Zidane was in would have caused a release of adrenalin and biological arousal, which in turn would intensify any type of emotional response.

The cognitive psychologist highlighted the role of schemas and top-down processing in influencing the interpretation of the situation and the response to it. He also highlighted selective attention, in that provocation might be unnoticed or ignored when attention is focused elsewhere. Interestingly, the football schema may also have determined the type of response, so that Zidane head-butted Materazzi rather than punching or hitting him.

The social psychologist emphasised the role of social identities. He described a number of identities for Zidane – a man, a football player, a team member, a French person, a symbol of multiculturalism and a person with a working-class background. It is interesting that Zidane himself tried to explain his behaviour by referring to the idea of having to be a 'man' (his gender identity) and his need to stand up to anyone who insulted his mother and sister. In addition, in his North African culture a female relative is seen as being sacrosanct, and dealing with insults would be a matter of 'family honour' (cultural identity).

To attempt a complete explanation you could suggest that a rush of chemicals in the body was precipitated by the stress of the wider social situation (including public and media pressures) which the footballer didn't deal with particularly well given his relationships with people involved, upbringing and culture. Most psychologists today would accept that any useful explanation, such as the one given for the Zidane head-butt, is going to describe an interaction of both internal and external influences.



The piece of behaviour that you have just examined lasted for a split second. Next you will look at an explanation of behaviour that developed and changed over a much longer period. Also, as each chapter has included a section on 'what makes us happy?', it would be interesting to look at the related question of 'what makes us depressed?'. Now you turn to applying these ideas about multiple influences to a case study of a man who has struggled with mental health problems.

### Kenny's experience: a personal story of depression

Looking at the evidence available on unhappiness and depression, it seems that a complex combination of influences needs to be taken into account. Kenny's story, told partly in his own words, is presented below. As you read what happened to him, try to get a 'feel' for his experience. It is possible that you have had a similar experience or you know someone who has gone through something like this, in which case you will have a greater appreciation of what Kenny has gone through.

#### Kenny's story

Five years ago Kenny was, in his own words, a 'gibbering idiot' – he had hit 'rock bottom':

I was absolutely terrified. I was jumping at my own shadow ... I was frightened of people – which is amazing because most of my adult working life was with people, I'd worked with people.

He first realised something was wrong when he began to wake up in the morning and pray there was something wrong with him. 'Anything, just so I didn't have to go to work.' Suddenly one morning, it was all too much. He walked out of his workplace and never went back.

I was just shaking the whole time, having panic attacks. I locked myself in the bedroom. It took weeks and weeks before I would go out. I would read, submerge myself in books, escape. I wasn't interested in anything. I just wanted to be in my bed ... I was scaring myself. It was a dreadful experience ... One minute I was alright and the next I could just go into a rage

about the simplest thing. It could be a trivial thing and I'd lose it completely.

Kenny's doctor put him on medication and also encouraged him to see a psychologist for counselling. After several months Kenny found that both treatments had been helpful. However, he still didn't feel 'himself'.

I was still very fearful. Didn't like to go into crowded places. I wouldn't go to the pub or club, or anywhere on my own ... I was still jumping at my own shadow. I couldn't understand why. I was very much in a shell ... I definitely wasn't myself.

### Doing something

Suddenly one morning, he found himself thinking: 'You've got to get out of this! You've got to do something!' The same day, his wife came home with the news that a friend of a friend had some repairs that needed doing to a van and would Kenny like to have a go? Previously Kenny had been a senior hotel manager but he had always liked working with his hands, so he decided to give it a go. He recognised how destructive it had been to have 'done nothing' for so long. 'I was beginning to feel useless', he admitted. He was also feeling somewhat ashamed as he considered himself to be the 'breadwinner' and 'man of the family'. But at the moment he was not fulfilling this role. He made the decision that day that he was going to get back into work somehow. That was the beginning of his recovery.

To Kenny's surprise at the end of his first day of this new 'work' he found that he had quite enjoyed himself and his repairs had been successful. He was then invited to do some odd jobs around the house – work he continued to do for a number of people over the next two years. Kenny grew in confidence until eventually he was able to find full-time work at a local factory. He had decided that he didn't want to go back to being a hotel manager – he didn't need to put himself through that stress.

I feel immensely proud of myself that I've managed to get back to where I am today in full-time employment. I'm quite content. It's not the job I trained for. But ... I've regained my sense of humour ... One chap come up to me and said ... 'We never



thought you'd still be here after the first week. We've nicknamed you the 'ice man'. No matter what anyone asks you to do you never get ruffled'.

On getting this feedback, Kenny thought to himself:

That'll do for me! ... I had beaten it!

(Finlay, 2004, pp. 30–4)

In one sense, Kenny's story is an ordinary, everyday story, one that would be familiar to many people who have suffered from mental health problems. But his story is also unique. Kenny emerges as a person, with a life, relationships, work and daily activities beyond his mental health problems. At the same time, his mental health problems affect the entirety of his life. As you 'feel' for Kenny, you might surmise the impact that his problems have on his self-image and relationships with others. You might also begin to imagine the hardships his family will have suffered during his more than two years of unemployment. Through his story, Kenny's tenacity and integrity as he struggles back to health is highlighted (Finlay, 2004).

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### Activity 36 Understanding the influences and pressures on Kenny

Allow about 30 minutes

Apply a 'psychologist's understanding' to Kenny's situation, using what you have learnt about in previous chapters. In particular, try to identify the factors within Kenny as an individual that may have contributed to his mental health crisis, and any external social factors that may have played a role in his problems. Kenny goes on to describe how he clambered back out of his particular abyss. Again, try to think about how inside and outside influences may have played a role in his recovery. (Please note that you are not given enough information to be able to say exactly why Kenny had his mental health problems. You can only suggest some possible influences which seem to be relevant.)

## Discussion

Seeing Kenny's problems in terms of factors inside himself, psychologists are likely to focus on his personality and his somewhat nervous disposition (which they would see as probably having a genetic component). He might also be viewed as being depressed, and again this would be seen as having a biological basis (for example, low serotonin levels). Psychologists would point to the role played by his slightly negative thinking in sustaining his condition, as this would have made any predisposition worse. For instance, when he was ill, did he get caught up in a spiral of negative thinking with thoughts such as 'I'm worthless', 'I can't cope'? They would also highlight the importance of Kenny's motivation and determination to survive and come through in his successful resolution of his crisis.

For psychologists looking at influences outside Kenny, cause and effect in Kenny's case are interrelated in complex ways. For example, while Kenny's illness may have been triggered by stresses related to his demanding work role as a hotel manager, his illness has made him even less able to cope at work, and a spiral of increased stress plus decreased ability to cope has been set up. As a result of his illness he was probably confronted by a number of changed social identities (for example, he is now 'a man who broke down') and the stigma of having mental health problems. As an unemployed man, Kenny has also lost the role and status of family breadwinner. Psychologists might well highlight these dimensions. As Finlay (2004) notes in an analysis of Kenny's story:

Kenny's [story] ... can ... be understood as a way of 'doing' masculinity ... His struggle to respect himself through finding a work role needs to be seen in the context of the stigma attached by his working class community to an unemployed man who is not fulfilling his family breadwinner role. Through his narrative performance focused on returning to work and becoming an 'iceman' he reasserts his preferred masculine identity.

(Finlay, 2004, p. 479)

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It is probably impossible to pinpoint exactly what first caused Kenny's depression as the factors involved are so closely linked that a change in one would cause a change in another. For example, a biological change in serotonin levels may have led to reduced energy and pessimistic



thinking which would make it difficult for him to cope in a stressful work situation. On the other hand, a prolonged period of stress caused by his work as a senior hotel manager may have led to biological changes and increased negative thinking.

The combination of factors that come together in these types of situations set up a downward spiral. The intervention of Kenny's doctor and psychologist would aim to first halt the downward spiral and then equip Kenny with the resources he needed to gradually reverse this process.

### **Human Genome Project**

an international research project begun in the 1980s which aims to identify and map the genes in humans

Research from scientists working on the **Human Genome Project** has provided insights into the interaction between genetic and environmental factors in determining our susceptibility to depression. They have analysed people's **DNA** and have been able to isolate a certain gene which affects the supply of serotonin, a chemical messenger used by neurons in the brain.

### **DNA**

(deoxyribonucleic acid)  
a chemical found in all cells which carries the genetic code that guides development

The complexity of the interaction between genes and environment is highlighted specifically by the research conducted by Avshalom Caspi et al. in 2003 (Oatley, 2007). They studied 1032 people who were followed up every couple of years or so between the ages of three and twenty-six. They were tested for a particular gene (the 5-HTT transporter gene) that promotes serotonin production. This gene occurs in two forms: short and long. 17 per cent of the people had two short genes, 51 per cent had a short and a long gene, and 31 per cent had two long genes. They were also asked about adverse life events (such as bereavement or serious ill health) between their 21st and 26th birthdays. The results of the study showed that, of the people who had suffered an adverse life event, those with one or two short forms of the gene were more likely to become depressed (and having two short forms increased the risk). Having two long forms (and therefore having increased levels of serotonin) protected people from depression in response to adversities. On the other hand, those with short forms did not get depressed when there was no adverse life event experienced.

However, what must be stressed is that this genetic component affects only susceptibility to depression. Two long forms of the gene do not give total protection, and likewise two short forms do not mean that depression is inevitable.

### Pause for thought



So far you have been looking at psychology as an academic discipline, but it is also a subject with many practical applications. For example, in the account of Kenny's experience of depression above, you read that he consulted a psychologist for help with his problems. Applied or professional psychologists can work in a number of areas. Clinical psychologists work with people who have mental health problems to try to help them overcome their difficulties. Educational psychologists focus on helping young people who are having problems in education. Forensic psychologists work with prisons and the police to reduce offender behaviour. In fact, professional psychologists can be found working in most areas that involve dealing with people.

Now you apply the idea of multiple influences to the question of 'what makes us happy?'.

## 6.3 What makes us happy?

The previous chapters of this book have focused on this question of 'what makes us happy?' by separating out and highlighting some of the different influences. Now you bring these influences together in order to continue to see the bigger picture that multiple influences are usually at work. Before reading on, it is worth taking a moment to review what you have already learnt about how happiness is influenced by factors within the person and outside, and how a person's brain/biology, thinking, relationships and social identities are implicated in how good they feel.

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### Activity 37 Revision time

Allow about 20 minutes

Briefly glance through the previous sections in each chapter on 'what makes us happy' and check any notes you've taken to remind yourself of key points. Then come up with six statements that you could make to someone if you were to give advice on what might help to make them happier. In your six statements try to cover all four aspects that you've studied, relating to the brain, thinking, relationships and social identities.



## Discussion

We hope that you were able to come up with a range of different ideas, for instance, recognising that a balanced diet can have a positive effect, as can becoming involved in a warm, supportive relationship.

In November 2005 the BBC presented a programme called *Making Slough Happy*. In this programme, psychologists and other professionals went to Slough and taught fifty local participants different strategies to make them happier. Their starting assumptions were that happiness is a skill and that people can be taught how to be happier. They gave the participants specific pointers to help them to increase positive feelings in their life. They started the programme by measuring the participants' happiness levels on a number of criteria. At the end of three months they re-measured and found that the levels had increased by approximately 30 per cent. Here are some of the strategies that they recommended, adapted and applied to the influences discussed above:

- **Your brain:**
    - Reduce simple carbohydrates, and eat fresh foods that boost serotonin.
    - Get oxygen to your brain – do some exercise!
  - **Your thinking:**
    - Think positively. At the end of each day, reflect on three things that went well, and why.
    - Meditate for ten minutes each day.
  - **Your relationships:**
    - Make contact with at least one friend – have a long, uninterrupted conversation with them, ideally meet up with them.
    - Show your gratitude to someone whom you have never thanked properly.
  - **Your role at 'work' (paid or unpaid):**
    - Think about one thing that you have done at work which you did well and you enjoyed doing. Think about the personal strengths you employed (for example, were you being extra creative, or particularly patient with someone, or did you assert yourself well?). Try to think of other ways you can use these strengths in your daily work.
-

## Naturally happy and nurturing happiness

Evidence from studies on twins shows that both nature and nurture contribute to people's happiness. On the genes side (nature), evidence shows that identical twins (with identical genes) are more similar in their happiness levels than twins who are not identical (who do not have identical genes). On the environment and experience side (nurture), scientists have demonstrated that our family relationships are more important than any other single factor affecting our happiness (Layard, 2005). Perhaps the key message here is that most people, regardless of genes or environment, can take steps to increase their level of happiness and feeling of wellbeing.

It is worth leaving the last words on the subject of happiness to Richard Layard, who is something of an expert. He concludes that:

Happiness comes from outside and from within. The two are not in contradiction. The true pilgrim fights the evils in the world out there and cultivates the spirit within.

(Layard, 2005, p. 235)

## 6.4 Learning skills – engaging in debate

In the academic world, answers to questions are rarely straightforward and simple. There is usually some kind of debate involved, as you've seen in this chapter. Answers to questions about 'what makes people who they are?' often come down to the perspective you adopt and the type of psychology you support. If you're a biological psychologist, then your explanations of behaviour are likely to highlight aspects of people's biological make-up. If you're a cognitive psychologist, then you'll concentrate on the power of human intellectual processes and thinking. If you're a social psychologist, then you'll emphasise influences outside the individual and within the social world. Each group of psychologists accepts that biological, cognitive and social factors are relevant – they just debate which are the most interesting and the most significant. Each group then offers its own evidence to support its position.

As well as debate between different groups, psychologists from the same group also engage in debate. There was an example of this in Chapter 5. Tajfel (1979) and his colleagues came up with strong evidence based on their minimal group experiments which



demonstrated the importance of group identity influencing behaviour. Wetherell (1982), however, offered contradictory evidence showing that culture was perhaps more significant than group identity. Or, to give another example from Chapter 5, look at the way the different social psychologists who study happiness and culture have approached their subject. In all of these examples, there is no 'right' answer. Instead, the answer depends – at least in part – on your interests and beliefs, and the way you argue your case.

Debate permeates most academic study, and as you pursue your studies, you will need to develop skills in how to debate. The fundamental lesson here is to recognise that there is a debate in the first place: ideas are always contested. Listen out for this the next time you hear or read a news report about someone's behaviour. Is more than one side of the argument presented? Is the offered argument logical and plausible? Is the argument presented with good supporting evidence?

Once you recognise the debate at stake, your next challenge is to learn the skill of presenting different points of view. This is often what you'll be asked to do when writing academic essays. Use the next activity to begin to practise this.

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### Activity 38 Practising debate skills

Allow about 20 minutes

Return to the research by Caspi et al. (2003), about the role of the 5-HTT transporter gene and adverse life events, in Section 6.2. Which evidence would you emphasise if you were arguing the biological psychological position? Which would you emphasise if you were a social psychologist?

If you wanted to argue the case for the interaction of biological and social factors using this evidence, what would your argument be? Summarise the nub of this argument in a sentence beginning: 'Caspi and his colleagues (2003) have shown that ...'.

### Discussion

We hope that you found spotting the relevant evidence reasonably straightforward and you highlighted the evidence relating to either genes or adverse life events. One danger when constructing arguments like these is the temptation to overstate the case, such as saying 'depression is caused by genes'. The research by Caspi et al. shows that certain genes can increase the risk of depression but they do so in conjunction with adverse life effects.

How easy or difficult did you find it to summarise the findings in one sentence? Did you recognise the more subtle point that genetic variations can increase the likelihood of depression (or predispose a person to it) rather than causing it as such?

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Being able to succinctly summarise research and use it as evidence to back up your argument is a key skill when learning to engage in academic debate.

## 6.5 Conclusion

In this chapter you have seen how, in trying to understand people, you need to be aware of a number of possible explanations. The main point to remember is that people are complex and subject to a range of influences, such as biology and the brain, the way they think, their upbringing and relationships, and the wider cultural context. While psychologists tend to agree that these multiple influences usually work in combination, they may sometimes disagree about which they regard as the most significant influences and how best to study them. Such debates are not simply a matter of academic interest. They carry important consequences in terms of how people, and their situations and actions, are viewed and treated. So psychologists pursue their research with even more rigour and passion. It is these debates which help to make psychology so fascinating.



## 7 A word from the Y183 module team

We hope that you have enjoyed reading the *Starting with psychology* book. So far Y183 has asked the question: 'What makes us (and other people) who we are?' You have discovered that there are no easy answers here. Each of us has been shaped by a number of different influences that have interacted with each other in complex ways to produce the unique and fascinating individuals that we all are.

The final two chapters of this module are located on the Y183 website, which you can link to from StudentHome. In Chapter 8, 'How psychologists do psychology', you will look more closely at several different research methods that have been introduced in this book. You will find out more about the main features and advantages and disadvantages of case studies, observations, surveys and experiments. Chapter 9, 'How psychologists apply psychology', will examine some of the practical applications of psychology in the areas of education, mental health, crime and work.

Once you have studied the online chapters we hope that you will want to continue your study of psychology and that, rather than feeling like you have got to the end of something, you feel like you are at the beginning of a longer course of study or even making plans for a new career.

Good luck and best wishes for whatever direction you decide to take.

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## Glossary

**Affect**

A feeling or emotion

**Amnesia**

A partial or complete loss of memory

**Anthropology**

The scientific study of the origin, the behaviour and the physical, social and cultural development of humans

**Biological psychology**

A branch of psychology that studies the link between biology and psychological events

**Bottom-up processing**

The processing of information about the world that flows up from the senses

**Capgras delusion**

A disorder in which a person believes that someone they know, usually a close family member, has been replaced by an identical looking impostor

**Central core**

The most central part of the brain, consisting of structures which regulate basic functions

**Cerebellum**

A fist-sized structure located at the lower back of the brain which is involved in the control of movement

**Cerebrum or cerebral hemispheres**

The largest part of the brain, consisting of two lobes or hemispheres. The cerebrum processes information from the senses and controls voluntary movements and thinking



**Chat room**

A place on the internet where people can meet and communicate by typing messages on their computers

**Cognitive psychology**

The branch of psychology that studies the mental processes involved in perception, learning, memory, and thinking

**Cognitive therapy**

A form of therapy where the goal is to replace negative or distorted thoughts with more positive and rational thoughts

**Collectivist culture**

A culture where group needs take precedence over individual needs and in turn the group takes responsibility for the wellbeing of the individual

**Concept formation**

The process of making a mental representation of a group of objects or events that share similar properties

**Conformity**

The tendency for members of a group to behave in a similar way to other members of the group

**Corpus callosum**

A bundle of nerve cells which connect one hemisphere of the brain with the other

**Cortex**

The outer layer of the brain

**Culture**

The history, values, customs and institutions of a group of people unified by, for example, ethnicity, nationality or language

**Dependent variable**

A variable that changes as a result of the manipulation of the independent variable and is measured by the experimenter

**Depression**

An affective disorder or disorder of mood characterised by extreme feelings of sadness, feelings of low self-esteem, social withdrawal and physical symptoms such as eating and sleep disturbances

**Developmental psychology**

The field of psychology that focuses on development across the lifespan

**DNA (deoxyribonucleic acid)**

A chemical found in all cells which carries the genetic code that guides development

**EEG (electroencephalograph)**

The recording of electrical activity in the brain by placing electrodes on the scalp

**Enactive thought**

Thinking based on impressions of actions

**Episodic memory**

Memory of our personal past

**et al.**

Translates as 'and others' and is often used when a number of people have been involved in a piece of research. You can just give the name of the main researcher and use 'et al.' to indicate that there were a number of other researchers

**Extended family**

A household consisting of parent(s) and their children plus other family members such as grandparents, uncles, aunts or cousins

**Genetic predisposition**

An inherited factor that increases the likelihood of a person displaying a particular characteristic

**Group pressure**

The demand by group members that individuals in the group conform to certain group standards/behaviours



**Halo effect**

A tendency to allow one particular characteristic to influence our overall impression of a person

**Hemispherical specialisation**

The specialisation of the left and right hemispheres of the brain so that different functions are associated more with one hemisphere than the other

**Hippocampus**

Two curved, seahorse-shaped structure near the centre of the brain which plays an important role in emotional behaviour and memory

**Human Genome Project**

An international research project begun in the 1980s which aims to identify and map the genes in humans

**Iconic thought**

Thinking based on using mental images

**Identity**

Our sense of ourselves which comes from our characteristic way of behaving (our personality and what we do) and how others see us

**Independent variable**

A variable that the experimenter manipulates

**Individualist culture**

A culture where the needs and achievements of individuals are emphasised

**In-group**

People who belong to the group which we consider we also belong to

**Instrumental relationships**

Relationships that last only as long as they are immediately useful and tend to be impersonal and carry few obligations

**Leading question**

A question that suggests a particular answer by the way in which the question is worded

**Limbic system**

A group of interconnected structures in the middle of the brain that are especially concerned with emotion and motivation

**Locus of control**

A person with an internal locus of control believes that they are responsible for their own actions and their destiny is under their own control. A person with an external locus of control believes that their destiny is controlled by external events

**Matching hypothesis**

A theory that people are more likely to form relationships with people who are roughly equally as physically attractive as themselves

**Mnemonic**

A technique for improving the memory

**Mortality rate**

The number of deaths in a group of people, usually expressed as deaths per thousand

**Neurologist**

A doctor who specialises in the diagnosis and treatment of disorders of the nervous system

**Neuron**

A type of cell that forms part of the nervous system and which is specialised for processing information

**Neurotransmitter**

A chemical that is released from a neuron and influences a neighbouring cell

**Norms**

The beliefs, expectations and standards of behaviour shared by group members

**Nuclear family**

A household consisting of parent(s) and their children



**Out-group**

People who do not belong to our group

**Overgeneralisation**

Extending the use of a word or concept to include objects or events that are similar but do not commonly belong to the concept

**Participant-observation**

A method of research where the researcher is both an observer and a participant

**Participants**

People who take part in a research study

**Perception**

The interpretation and understanding of information received from the senses

**Plasticity**

The ability of the brain to adapt to changing circumstances

**Positive psychology**

A movement in psychology which emphasises what is right with people rather than what is wrong with them

**Prejudice**

A biased attitude either for or more usually against something formed without knowledge, thought or reason

**Primacy effect**

Information that is presented first is recalled better than later information

**Procedural memory**

Memory of how to do things

**Role**

A position within a group that determines appropriate behaviour for the person occupying it

**Role conflict**

Tensions that occur when different or incompatible roles are taken on

**Schema**

A mental framework of knowledge developed as a result of experience

**Script**

An established pattern of social interaction followed by people in a particular social context

**Self-concept**

The set of ideas, beliefs and attitudes that we have about ourselves

**Self-fulfilling prophecy**

A process by which expectations about a person come true because other people treat them according to expectations

**Semantic memory**

Memory of facts

**Semantic thought**

Thinking based on words and meaning

**Sensation**

The initial registration by our senses of information from the world about us

**Serotonin**

A neurotransmitter that plays a part in the regulation of sleep, appetite and mood

**Social constructionism**

A psychological theory which emphasises how the ways in which we understand the world are constructed between people in everyday social interactions

**Social identity theory**

A theory that describes how membership of social groups forms a significant part of the self-concept so that someone responds as a group member rather than as an individual



## **Social psychology**

The study of the individual in the social world

## **Socialisation**

The process by which individuals come to learn the beliefs, values, rules, skills and patterns of behaviour that are appropriate for their society or culture

## **Spatial ability**

The ability to mentally manipulate figures in space

## **Stereotype**

A schema about a group of people where we assume that a person will have all of the qualities associated with that group

## **Stroke**

A sudden change in the blood supply to a part of the brain, which can cause damage to that part of the brain

## **Theory of mind**

The ability to realise that other people also have knowledge, beliefs, intentions and feelings, and these may differ from one's own

## **Top-down processing**

The influence of information flowing down from stored knowledge based on past experience

## **Trait**

A personality characteristic

## **UNICEF (United Nations International Children's Fund)**

A body of the United Nations that focuses on the protection, welfare and basic needs of children

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Figure 30: Frith, U. (1989) 'Figure 10.1 The Sally–Anne experiment', *Autism: Explaining the Enigma*, Blackwell Publishing Limited; Figure 40: © Jeremy Sutton-Hibbert/Alamy.

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# Starting with psychology

**Y183 Starting with psychology** is a short module aimed at anyone who is interested in people and what influences their thoughts, feelings and behaviour. It is a wide-ranging module that considers how aspects of our biology, ways of thinking, important relationships and membership of different groups combine to make us who we are.

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